23 July, 24

BYTEWISE FELLOWSHIP CYBERSECURITY

Bandit Level 21-30

BY: SEERAT E MARRYUM

Bandit Level 20 → Level 21

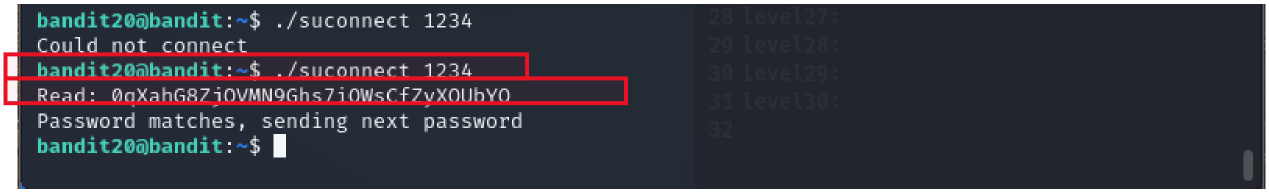
Level Goal

There is a setuid binary in the homedirectory that does the following: it makes a connection to localhost on the port you specify as a commandline argument. It then reads a line of text from the connection and compares it to the password in the previous level (bandit20). If the password is correct, it will transmit the password for the next level (bandit21).

NOTE: Try connecting to your own network daemon to see if it works as you think

Commands you may need to solve this level

ssh, nc, cat, bash, screen, tmux, Unix ‘job control’ (bg, fg, jobs, &, CTRL-Z, …)



```
bandit20@bandit:~$ ./suconnect 1234
Could not connect
bandit20@bandit:~$ ./suconnect 1234
Read: 0gXahG8ZjOVMN9Ghs7iOWsCfZyXOUbYO
Password matches, sending next password
bandit20@bandit:~$
```

On other terminal:

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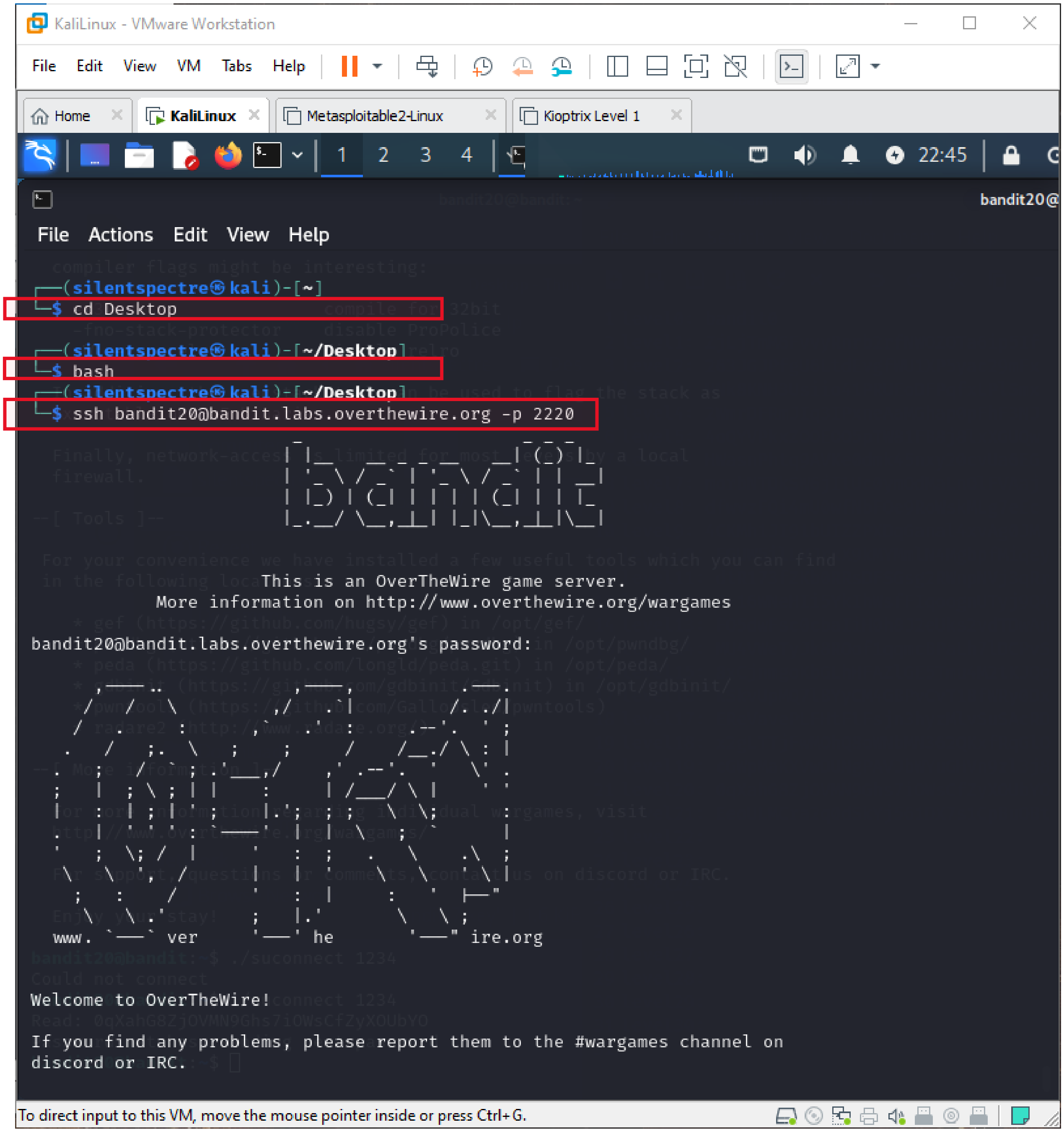
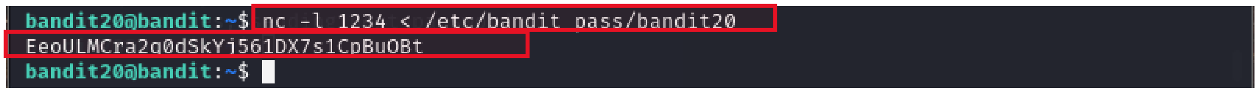

KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
KaliLinux
Metasploitable2-Linux
Kioptrix Level 1
1 2 3 4
22:45
bandit20@
File Actions Edit View Help

```
┌──(silentspectre㉿kali)-[~]
└─$ cd Desktop
┌──(silentspectre㉿kali)-[~/Desktop]
└─$ bash
┌──(silentspectre㉿kali)-[~/Desktop]
└─$ ssh bandit20@bandit.labs.overthewire.org -p 2220

                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit20@bandit.labs.overthewire.org's password:

Welcome to OverTheWire!

If you find any problems, please report them to the #wargames channel on
discord or IRC.
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.



```
bandit20@bandit:~$ nc -l 1234 < /etc/bandit_pass/bandit20
EeoULMCra2q0dSkYj561DX7s1CpBuOBt
bandit20@bandit:~$
```

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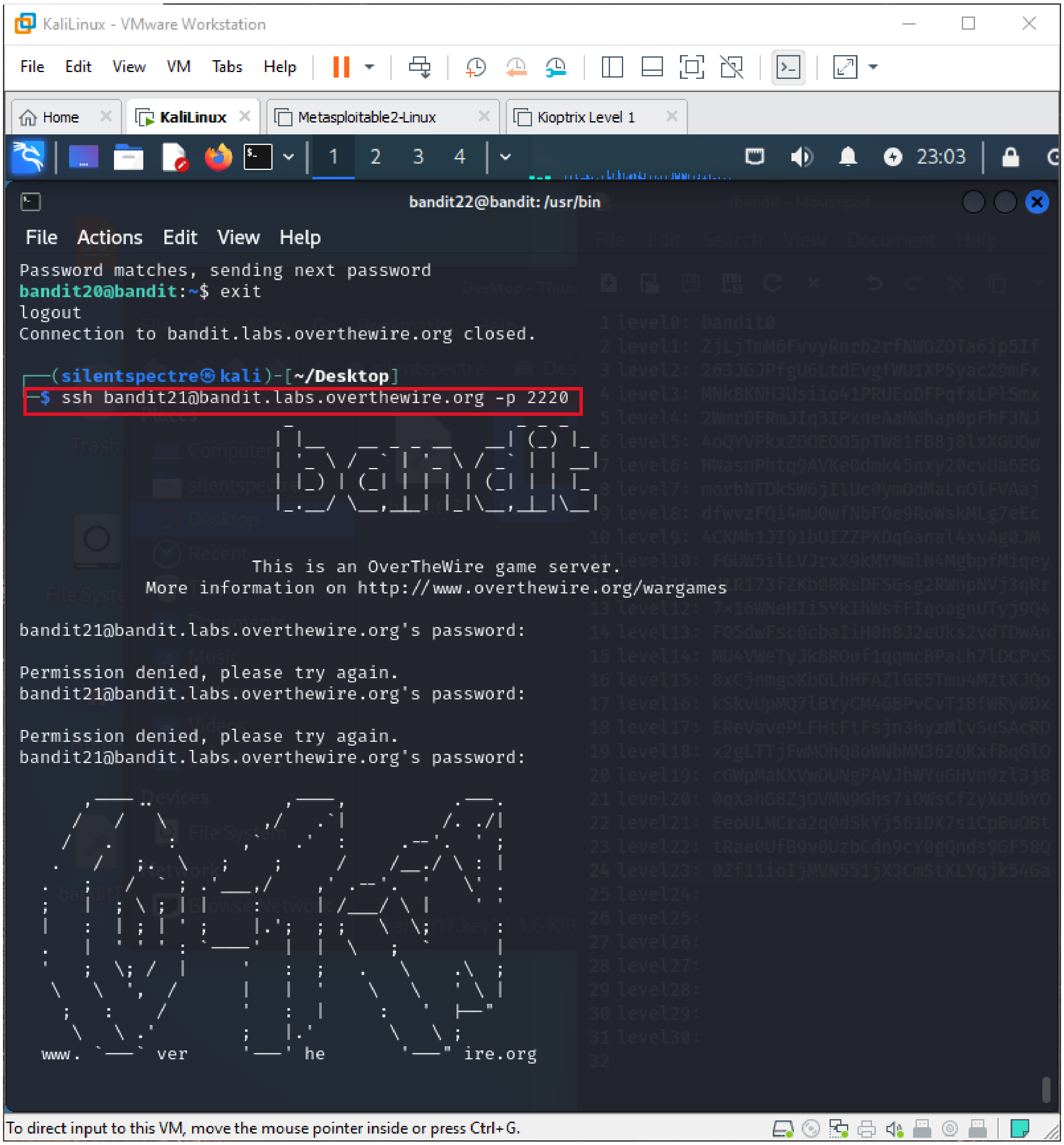

KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
KaliLinux
Metasploitable2-Linux
Kioptrix Level 1
1 2 3 4
23:03
bandit22@bandit: /usr/bin
File Actions Edit View Help

```
Password matches, sending next password
bandit20@bandit:~$ exit
logout
Connection to bandit.labs.overthewire.org closed.

┌──(silentspectre㉿kali)-[~/Desktop]
└─$ ssh bandit21@bandit.labs.overthewire.org -p 2220
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|


                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit21@bandit.labs.overthewire.org's password:

Permission denied, please try again.
bandit21@bandit.labs.overthewire.org's password:

Permission denied, please try again.
bandit21@bandit.labs.overthewire.org's password:
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

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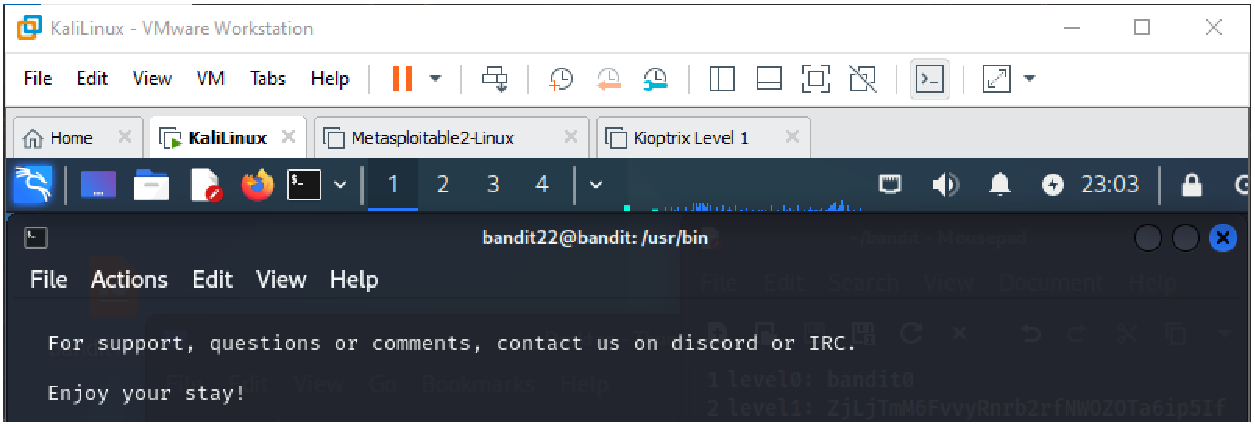

KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
KaliLinux
Metasploitable2-Linux
Kioptrix Level 1
1 2 3 4
23:03
bandit22@bandit: /usr/bin
File Actions Edit View Help

```
For support, questions or comments, contact us on discord or IRC.

Enjoy your stay!
```

Bandit Level 21 → Level 22

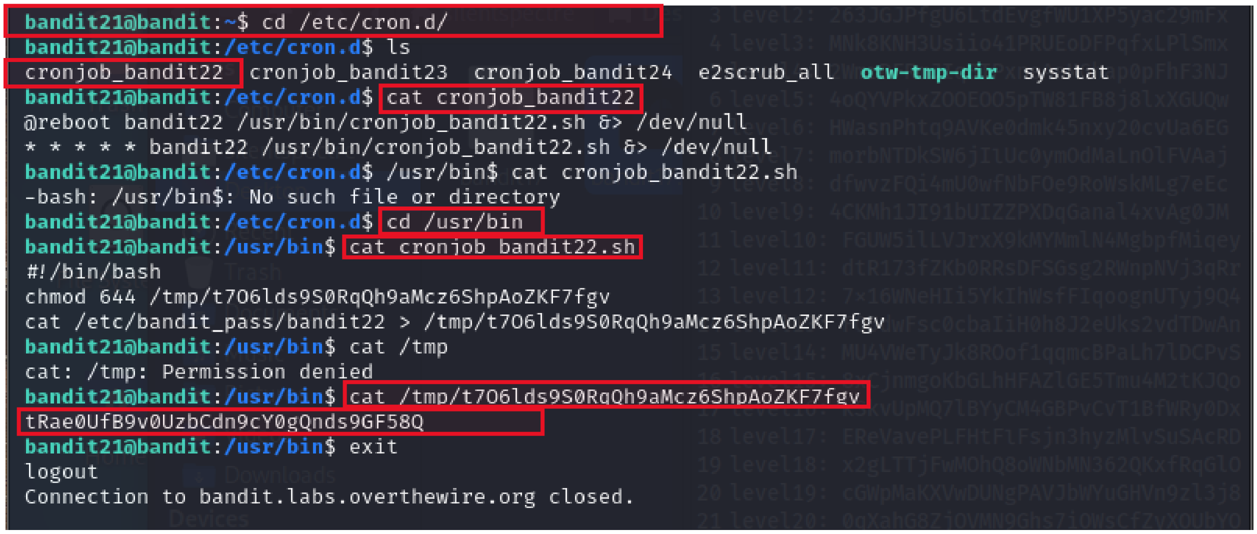
Level Goal

A program is running automatically at regular intervals from **cron**, the time-based job scheduler.

Look in **/etc/cron.d/** for the configuration and see what command is being executed.

Commands you may need to solve this level

cron, crontab, crontab(5) (use “man 5 crontab” to access this)



```
bandit21@bandit:~$ cd /etc/cron.d/
bandit21@bandit:/etc/cron.d$ ls
cronjob_bandit22  cronjob_bandit23  cronjob_bandit24  e2scrub_all  otw-tmp-dir  sysstat
bandit21@bandit:/etc/cron.d$ cat cronjob_bandit22
@reboot bandit22 /usr/bin/cronjob_bandit22.sh &> /dev/null
* * * * * bandit22 /usr/bin/cronjob_bandit22.sh &> /dev/null
bandit21@bandit:/etc/cron.d$ /usr/bin$ cat cronjob_bandit22.sh
-bash: /usr/bin$: No such file or directory
bandit21@bandit:/etc/cron.d$ cd /usr/bin
bandit21@bandit:/usr/bin$ cat cronjob_bandit22.sh
#!/bin/bash
chmod 644 /tmp/t7O6lds9S0RqQh9aMcz6ShpAoZKF7fgv
cat /etc/bandit_pass/bandit22 > /tmp/t7O6lds9S0RqQh9aMcz6ShpAoZKF7fgv
bandit21@bandit:/usr/bin$ cat /tmp
cat: /tmp: Permission denied
bandit21@bandit:/usr/bin$ cat /tmp/t7O6lds9S0RqQh9aMcz6ShpAoZKF7fgv
tRae0UfB9v0UzbCdn9cY0gQnds9GF58Q
bandit21@bandit:/usr/bin$ exit
logout
Connection to bandit.labs.overthewire.org closed.
```

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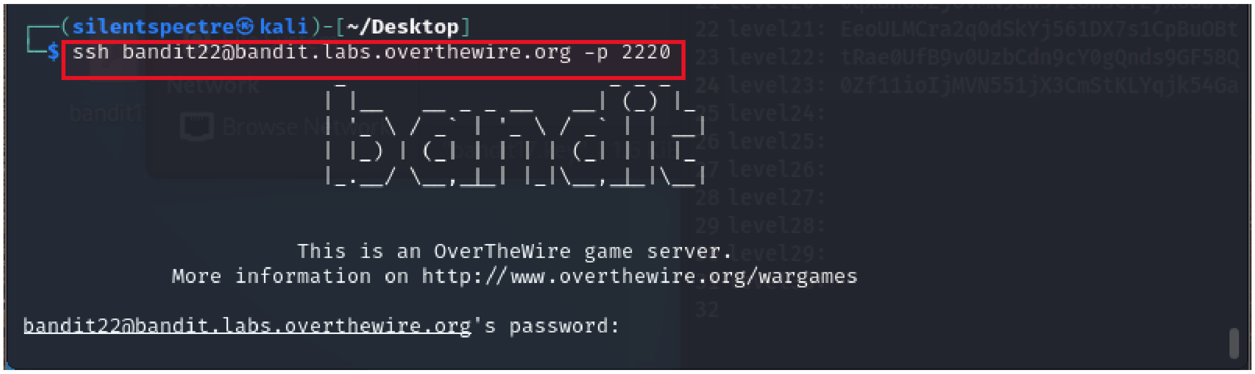
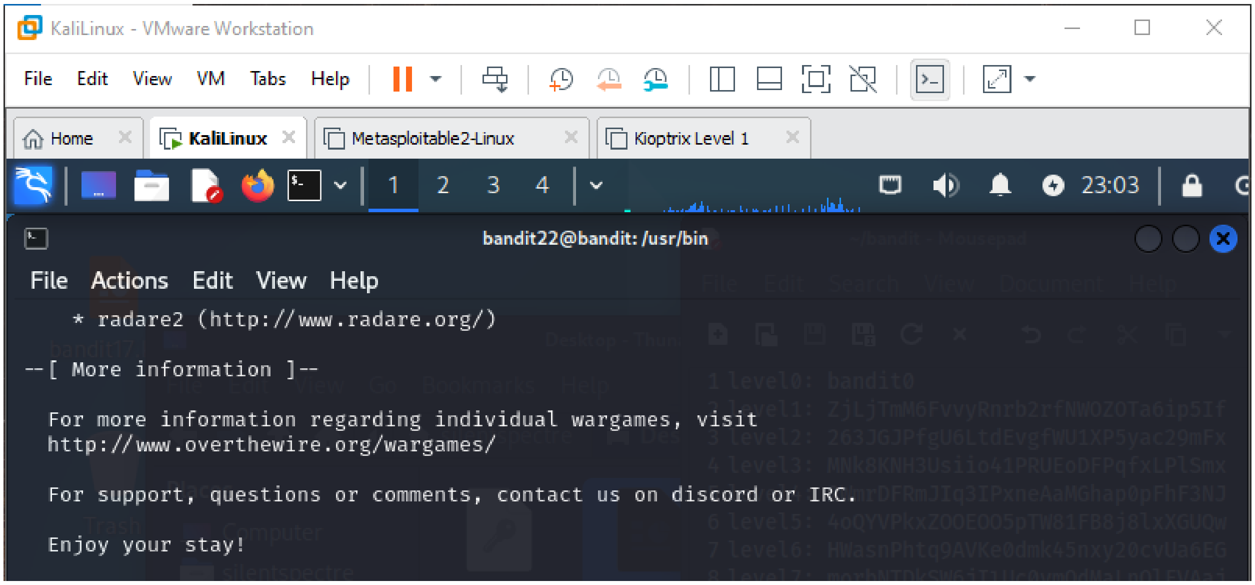


```
┌──(silentspectre㉿kali)-[~/Desktop]
└─$ ssh bandit22@bandit.labs.overthewire.org -p 2220
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|


                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit22@bandit.labs.overthewire.org's password:
```



KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
KaliLinux
Metasploitable2-Linux
Kioptrix Level 1
1 2 3 4
23:03
bandit22@bandit: /usr/bin
File Actions Edit View Help

```
    * radare2 (http://www.radare.org/)

--[ More information ]--

  For more information regarding individual wargames, visit
  http://www.overthewire.org/wargames/

  For support, questions or comments, contact us on discord or IRC.

  Enjoy your stay!
```

Bandit Level 22 → Level 23

Level Goal

A program is running automatically at regular intervals from **cron**, the time-based job scheduler. Look in **/etc/cron.d/** for the configuration and see what command is being executed.

NOTE: Looking at shell scripts written by other people is a very useful skill. The script for this level is intentionally made easy to read. If you are having problems understanding what it does, try executing it to see the debug information it prints.

Commands you may need to solve this level

cron, crontab, crontab(5) (use “man 5 crontab” to access this)

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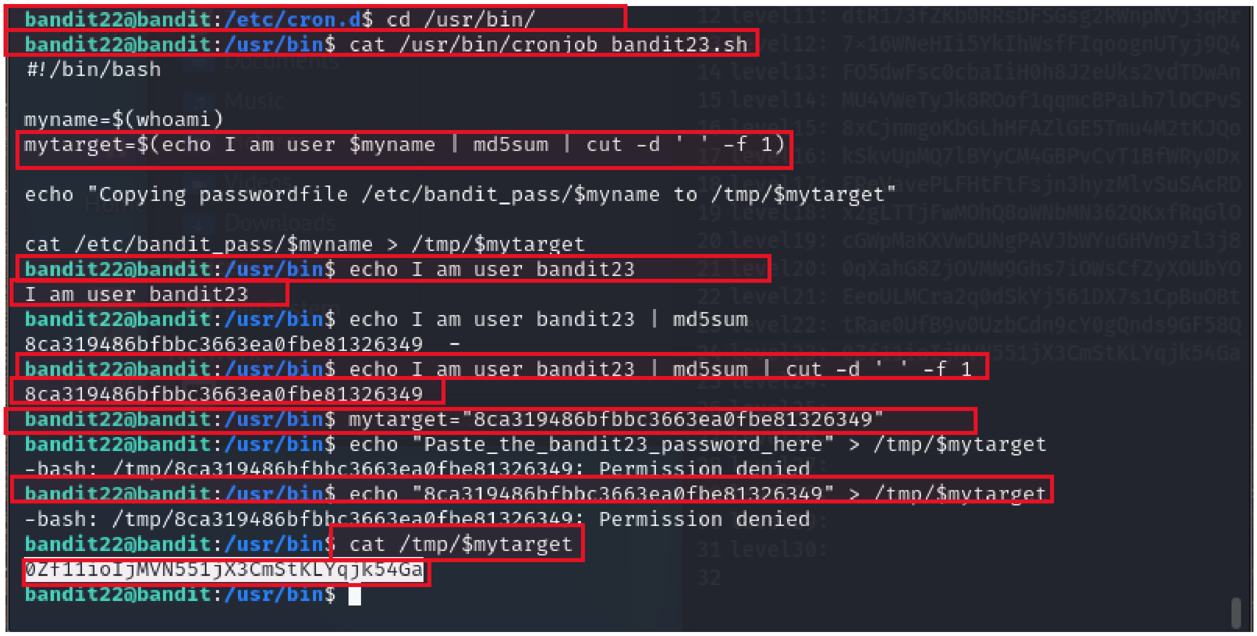

```
bandit22@bandit:/etc/cron.d$ cd /usr/bin/
bandit22@bandit:/usr/bin$ cat /usr/bin/cronjob_bandit23.sh
#!/bin/bash

myname=$(whoami)
mytarget=$(echo I am user $myname | md5sum | cut -d ' ' -f 1)

echo "Copying passwordfile /etc/bandit_pass/$myname to /tmp/$mytarget"

cat /etc/bandit_pass/$myname > /tmp/$mytarget
bandit22@bandit:/usr/bin$ echo I am user bandit23
I am user bandit23
bandit22@bandit:/usr/bin$ echo I am user bandit23 | md5sum
8ca319486bfbbc3663ea0fbe81326349  -
bandit22@bandit:/usr/bin$ echo I am user bandit23 | md5sum | cut -d ' ' -f 1
8ca319486bfbbc3663ea0fbe81326349
bandit22@bandit:/usr/bin$ mytarget="8ca319486bfbbc3663ea0fbe81326349"
bandit22@bandit:/usr/bin$ echo "Paste_the_bandit23_password_here" > /tmp/$mytarget
-bash: /tmp/8ca319486bfbbc3663ea0fbe81326349: Permission denied
bandit22@bandit:/usr/bin$ echo "8ca319486bfbbc3663ea0fbe81326349" > /tmp/$mytarget
-bash: /tmp/8ca319486bfbbc3663ea0fbe81326349: Permission denied
bandit22@bandit:/usr/bin$ cat /tmp/$mytarget
0Zf11ioIjMVN551jX3CmStKLYqjk54Ga
bandit22@bandit:/usr/bin$ 
```

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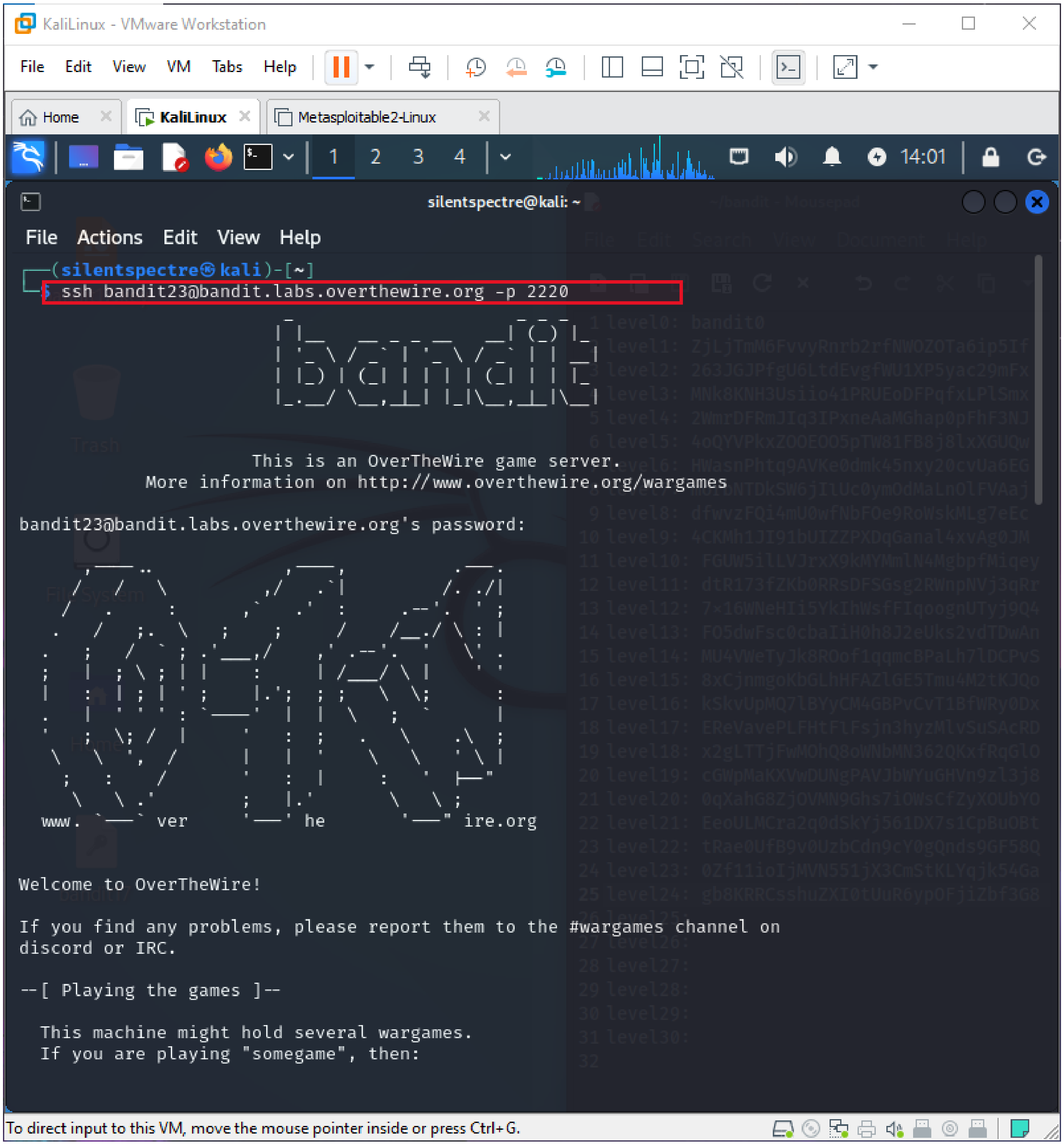
KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
KaliLinux
Metasploitable2-Linux
1 2 3 4
14:01
silentspectre@kali: ~
File Actions Edit View Help
~/bandit - Mousepad
File Edit Search View Document Help
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

```
┌──(silentspectre㉿kali)-[~]
└─$ ssh bandit23@bandit.labs.overthewire.org -p 2220
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|


                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit23@bandit.labs.overthewire.org's password:

      ,----..            ,----,          .---.
     /   /   \         ,/   .`|         /. ./|
    /   .     :      ,`   .'  :     .--'.  ' ;
   .   /   ;.  \   ;    ;     /    /__./ \ : |
  .   ;   /  ` ; .'___,/    ,' .--'.  '   \' .
  ;   |  ; \ ; | |    :     | /___/ \ |    ' '
  |   :  | ; | ' ;    |.';  ; ;   \  \;      :
  .   |  ' ' ' : `----'  |  |  \   ;  `      |
  '   ;  \; /  |     '   :  ;   .   \    .\  ;
   \   \  ',  /      |   |  '    \   \   ' \ |
    ;   :    /       '   :  |     :   '  |--"
     \   \ .'        ;   |.'       \   \ ;
  www. `---` ver     '---' he       '---" ire.org


Welcome to OverTheWire!

If you find any problems, please report them to the #wargames channel on
discord or IRC.

--[ Playing the games ]--

  This machine might hold several wargames.
  If you are playing "somegame", then:
```

```
level0: bandit0
level1: ZjLjTmM6FvvyRnrb2rfNWOZOTa6ip5If
level2: 263JGJPfgU6LtdEvgfWU1XP5yac29mFx
level3: MNk8KNH3Usiio41PRUEoDFPqfxLPlSmx
level4: 2WmrDFRmJIq3IPxneAaMGhap0pFhF3NJ
level5: 4oQYVPkxZOOEOO5pTW81FB8j8lxXGUQw
level6: HWasnPhtq9AVKe0dmk45nxy20cvUa6EG
level7: morbNTDkSW6jIlUc0ymOdMaLnOlFVAaj
level8: dfwvzFQi4mU0wfNbFOe9RoWskMLg7eEc
level9: 4CKMh1JI91bUIZZPXDqGanal4xvAg0JM
level10: FGUW5ilLVJrxX9kMYMmlN4MgbpfMiqey
level11: dtR173fZKb0RRsDFSGsg2RWnpNVj3qRr
level12: 7x16WNeHIi5YkIhWsfFIqoognUTyj9Q4
level13: FO5dwFsc0cbaIiH0h8J2eUks2vdTDwAn
level14: MU4VWeTyJk8ROof1qqmcBPaLh7lDCPvS
level15: 8xCjnmgoKbGLhHFAZlGE5Tmu4M2tKJQo
level16: kSkvUpMQ7lBYyCM4GBPvCvT1BfWRy0Dx
level17: EReVavePLFHtFlFsjn3hyzMlvSuSAcRD
level18: x2gLTTjFwMOhQ8oWNbMN362QKxfRqGlO
level19: cGWpMaKXVwDUNgPAVJbWYuGHVn9zl3j8
level20: 0qXahG8ZjOVMN9Ghs7iOWsCfZyXOUbYO
level21: EeoULMCra2q0dSkYj561DX7s1CpBuOBt
level22: tRae0UfB9v0UzbCdn9cY0gQnds9GF58Q
level23: 0Zf11ioIjMVN551jX3CmStKLYqjk54Ga
level24: gb8KRRCsshuZXI0tUuR6yp0FjiZbf3G8
level25:
level26:
level27:
level28:
level29:
level30:
```

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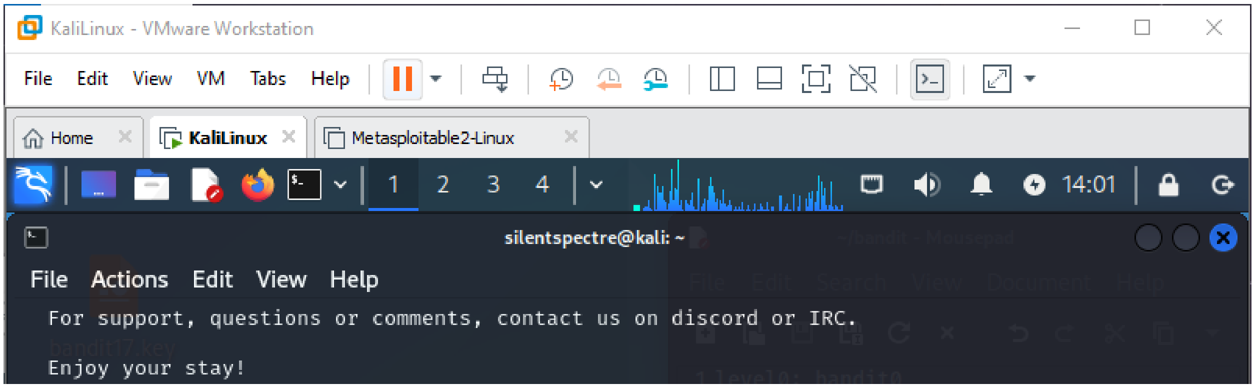

KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
KaliLinux
Metasploitable2-Linux
1 2 3 4
14:01
silentspectre@kali: ~
File Actions Edit View Help

```
For support, questions or comments, contact us on discord or IRC.

Enjoy your stay!
```

Bandit Level 23 → Level 24

Level Goal

A program is running automatically at regular intervals from **cron**, the time-based job scheduler.

Look in **/etc/cron.d/** for the configuration and see what command is being executed.

NOTE: This level requires you to create your own first shell-script. This is a very big step and you should be proud of yourself when you beat this level!

NOTE 2: Keep in mind that your shell script is removed once executed, so you may want to keep a copy around…

Commands you may need to solve this level

chmod, cron, crontab, crontab(5) (use “man 5 crontab” to access this)

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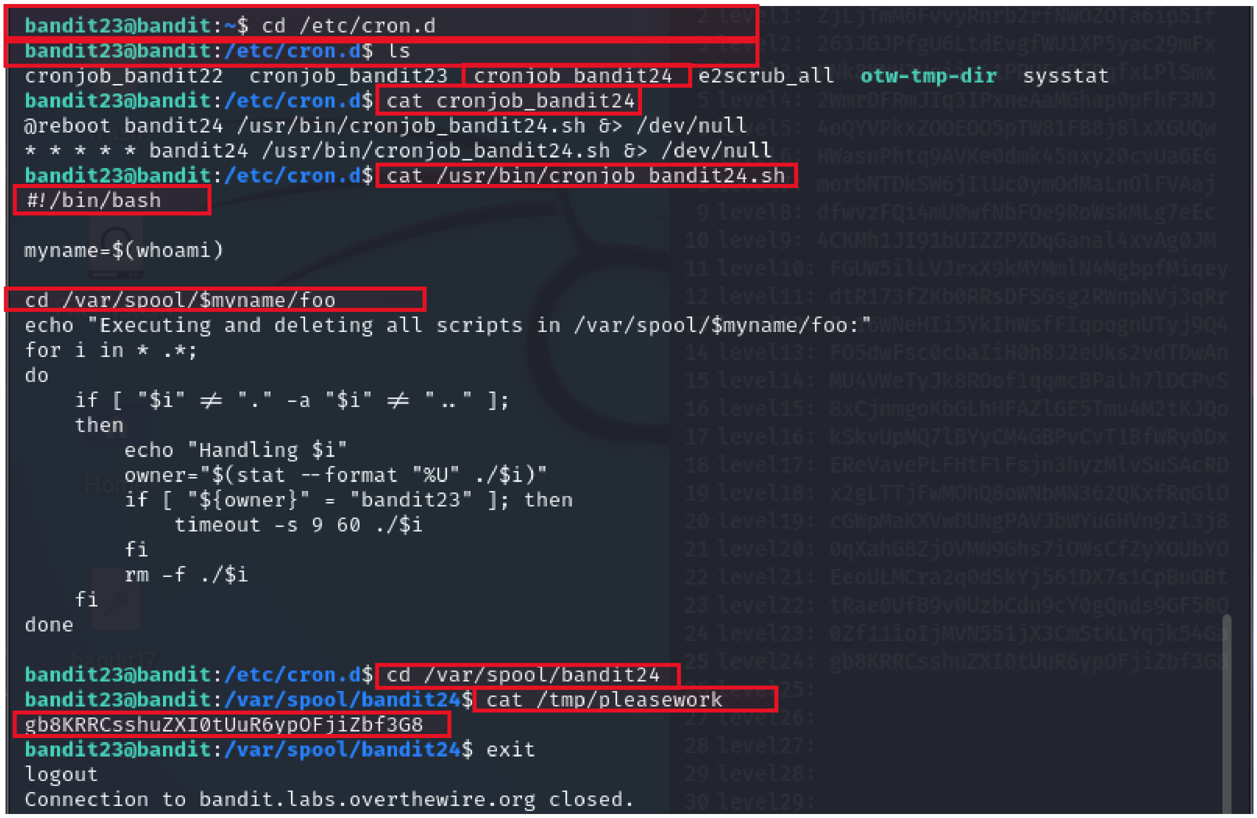

```
bandit23@bandit:~$ cd /etc/cron.d
bandit23@bandit:/etc/cron.d$ ls
cronjob_bandit22  cronjob_bandit23  cronjob_bandit24  e2scrub_all  otw-tmp-dir  sysstat
bandit23@bandit:/etc/cron.d$ cat cronjob_bandit24
@reboot bandit24 /usr/bin/cronjob_bandit24.sh &> /dev/null
* * * * * bandit24 /usr/bin/cronjob_bandit24.sh &> /dev/null
bandit23@bandit:/etc/cron.d$ cat /usr/bin/cronjob_bandit24.sh
#!/bin/bash

myname=$(whoami)

cd /var/spool/$myname/foo
echo "Executing and deleting all scripts in /var/spool/$myname/foo:"
for i in * .*;
do
    if [ "$i" ≠ "." -a "$i" ≠ ".." ];
    then
        echo "Handling $i"
        owner="$(stat --format "%U" ./$i)"
        if [ "${owner}" = "bandit23" ]; then
            timeout -s 9 60 ./$i
        fi
        rm -f ./$i
    fi
done

bandit23@bandit:/etc/cron.d$ cd /var/spool/bandit24
bandit23@bandit:/var/spool/bandit24$ cat /tmp/pleasework
gb8KRRCsshuZXI0tUuR6ypOFjiZbf3G8
bandit23@bandit:/var/spool/bandit24$ exit
logout
Connection to bandit.labs.overthewire.org closed.
```

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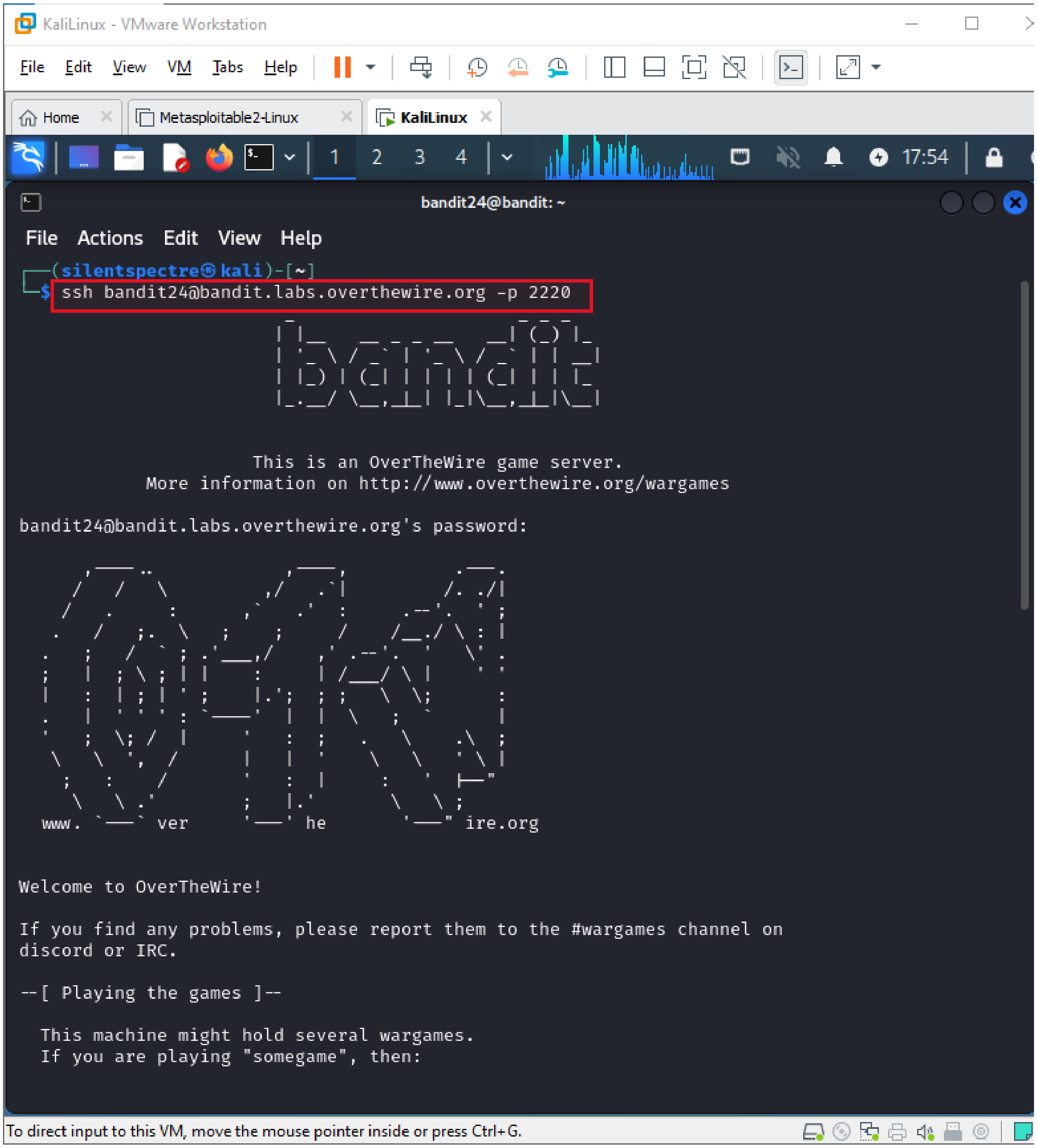
KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
Metasploitable2-Linux
KaliLinux
1 2 3 4
17:54
bandit24@bandit: ~
File Actions Edit View Help
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

```
┌──(silentspectre㉿kali)-[~]
└─$ ssh bandit24@bandit.labs.overthewire.org -p 2220
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|


                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit24@bandit.labs.overthewire.org's password:

      ,----..            ,----,          .---.
     /   /   \         ,/   .`|         /. ./|
    /   .     :      ,`   .'  :     .--'.  ' ;
   .   /   ;.  \   ;    ;     /    /__./ \ : |
  .   ;   /  ` ; .'___,/    ,'.--'.  '   \' .
  ;   |  ; \ ; | |    :     |/___/ \ |    ' '
  |   :  | ; | ' ;    |.';  ;;   \  \;      :
  .   |  ' ' ' : `----'  |  | \   ;  `      |
  '   ;  \; /  |     '   :  ;  .   \    .\  ;
   \   \  ',  /      |   |  '   \   \   ' \ |
    ;   :    /       '   :  |    :   '  |--"
     \   \ .'        ;   |.'      \   \ ;
  www. `---` ver     '---' he      '---" ire.org


Welcome to OverTheWire!

If you find any problems, please report them to the #wargames channel on
discord or IRC.

--[ Playing the games ]--

  This machine might hold several wargames.
  If you are playing "somegame", then:
```

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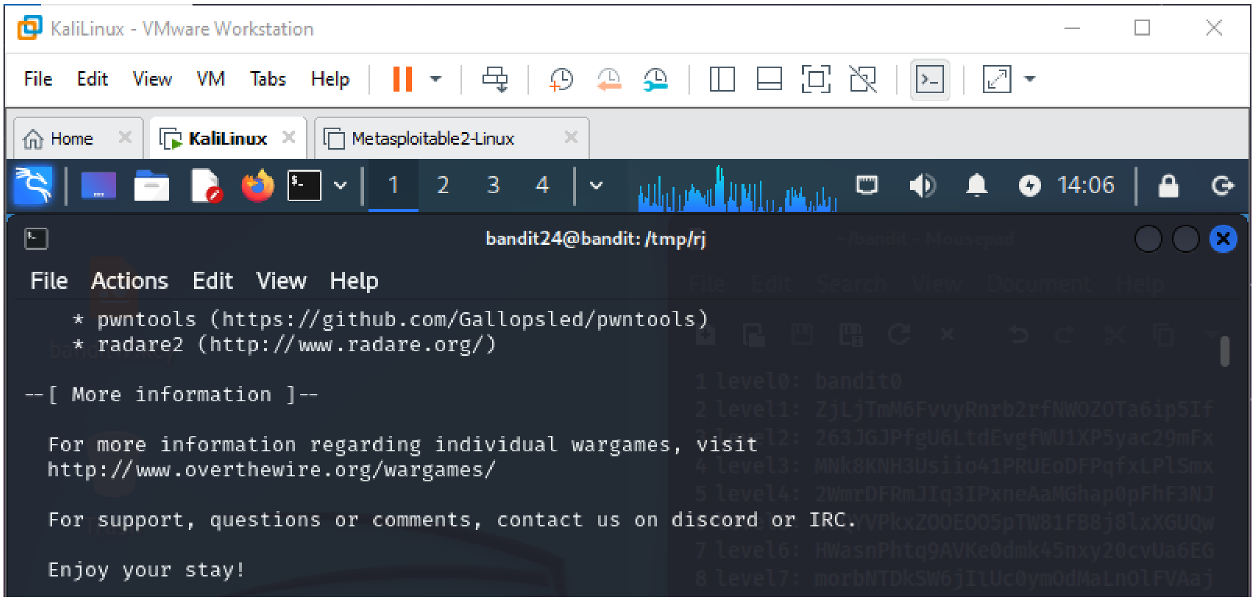
KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
KaliLinux
Metasploitable2-Linux
1 2 3 4
14:06
bandit24@bandit: /tmp/rj
File Actions Edit View Help

```
    * pwntools (https://github.com/Gallopsled/pwntools)
    * radare2 (http://www.radare.org/)

--[ More information ]--

  For more information regarding individual wargames, visit
  http://www.overthewire.org/wargames/

  For support, questions or comments, contact us on discord or IRC.

  Enjoy your stay!
```

Bandit Level 24 → Level 25

Level Goal

A daemon is listening on port 30002 and will give you the password for bandit25 if given the password for bandit24 and a secret numeric 4-digit pincode. There is no way to retrieve the pincode except by going through all of the 10000 combinations, called brute-forcing.

You do not need to create new connections each time

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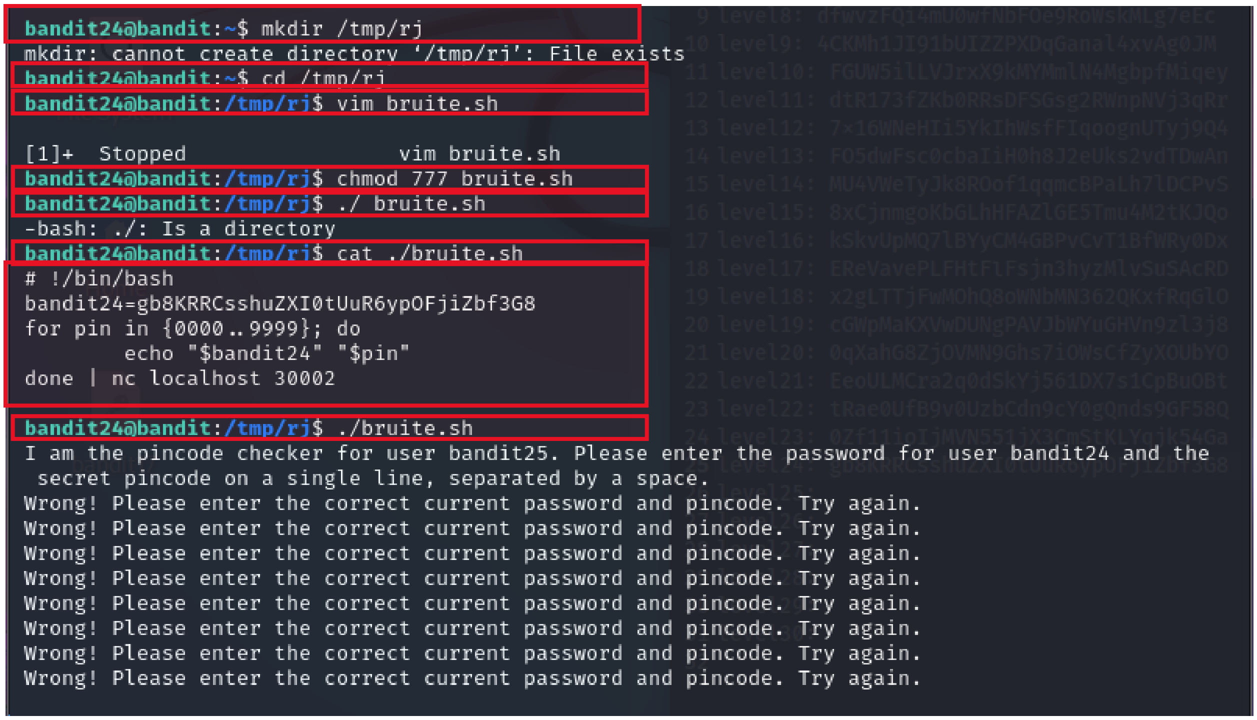

```
bandit24@bandit:~$ mkdir /tmp/rj
mkdir: cannot create directory '/tmp/rj': File exists
bandit24@bandit:~$ cd /tmp/rj
bandit24@bandit:/tmp/rj$ vim bruite.sh

[1]+  Stopped                 vim bruite.sh
bandit24@bandit:/tmp/rj$ chmod 777 bruite.sh
bandit24@bandit:/tmp/rj$ ./ bruite.sh
-bash: ./: Is a directory
bandit24@bandit:/tmp/rj$ cat ./bruite.sh
# !/bin/bash
bandit24=gb8KRRCsshuZXI0tUuR6ypOFjiZbf3G8
for pin in {0000..9999}; do
        echo "$bandit24" "$pin"
done | nc localhost 30002

bandit24@bandit:/tmp/rj$ ./bruite.sh
I am the pincode checker for user bandit25. Please enter the password for user bandit24 and the
 secret pincode on a single line, separated by a space.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
```

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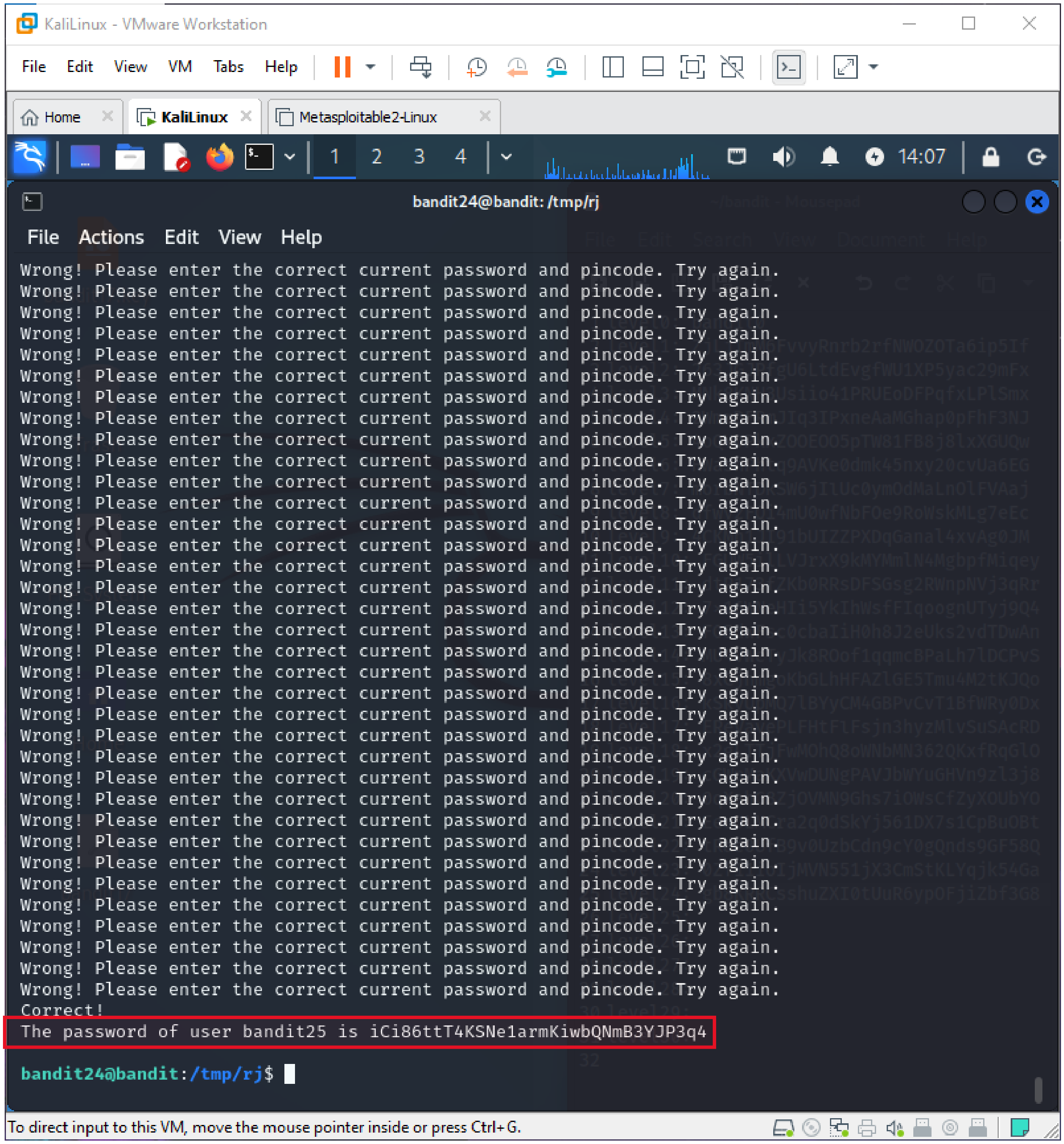
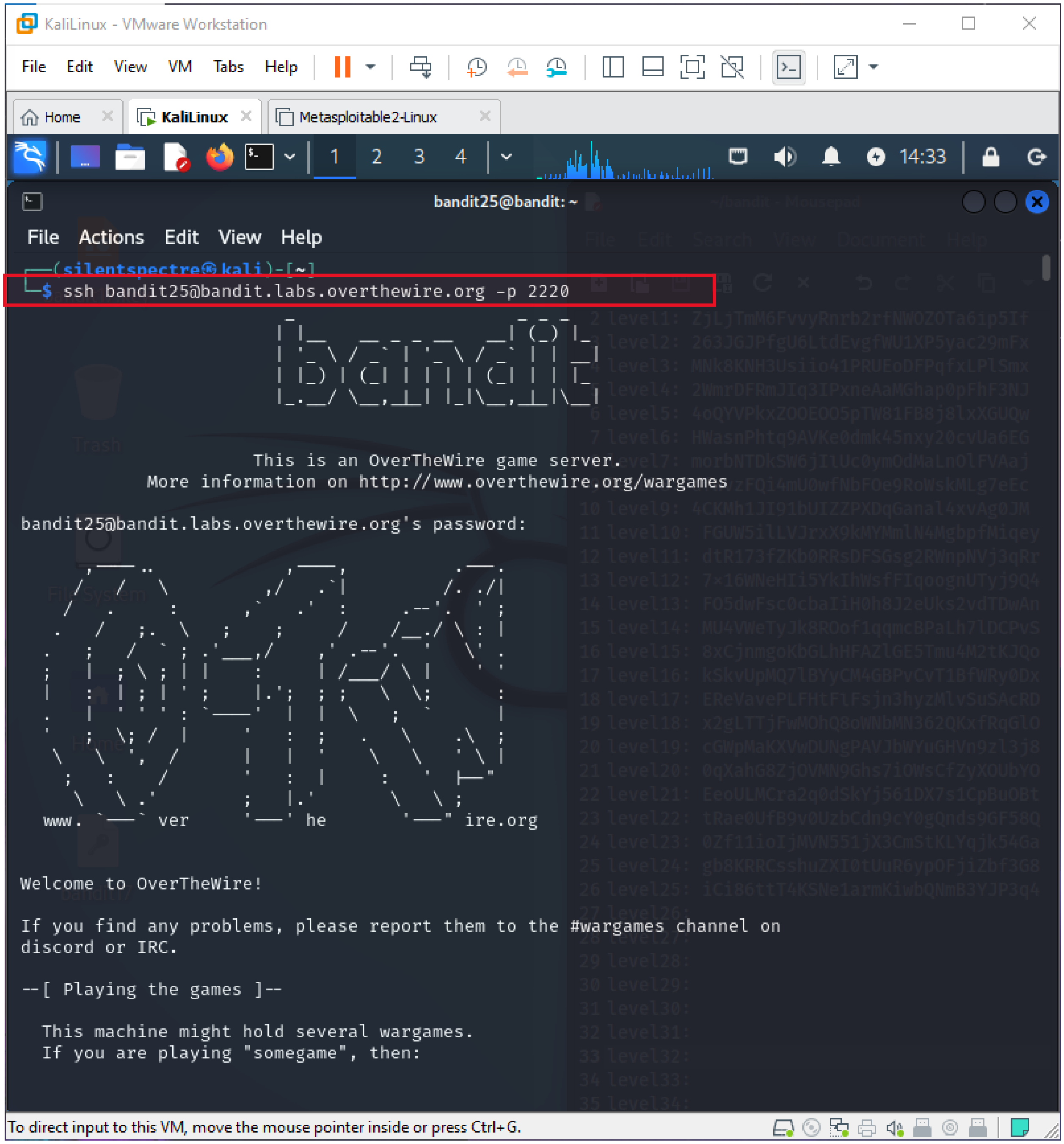

KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
KaliLinux
Metasploitable2-Linux
1 2 3 4
14:07
bandit24@bandit: /tmp/rj
File Actions Edit View Help

```
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Wrong! Please enter the correct current password and pincode. Try again.
Correct!
The password of user bandit25 is iCi86ttT4KSNe1armKiwbQNmB3YJP3q4

bandit24@bandit:/tmp/rj$ 
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

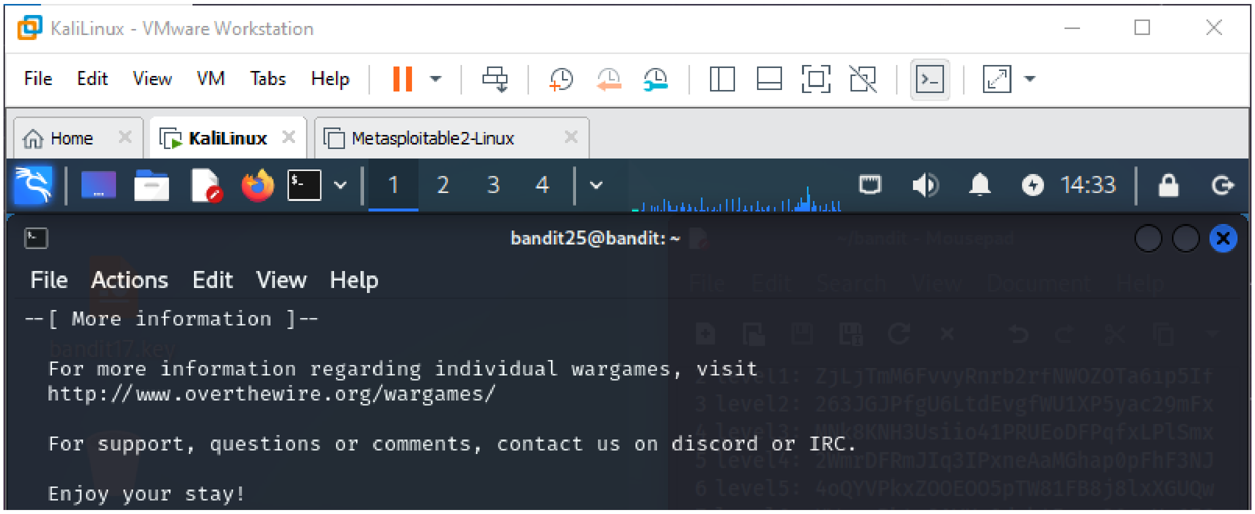
23 July, 24


KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
KaliLinux
Metasploitable2-Linux
1 2 3 4
14:33
bandit25@bandit: ~
File Actions Edit View Help
~/bandit - Mousepad
File Edit Search View Document Help
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

```
┌──(silentspectre㉿kali)-[~]
└─$ ssh bandit25@bandit.labs.overthewire.org -p 2220
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|


                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit25@bandit.labs.overthewire.org's password:

      ,----..            ,----,          .---.
     /   /   \         ,/   .`|         /. ./|
    /   .     :      ,`   .'  :     .--'.  ' ;
   .   /   ;.  \   ;    ;     /    /__./ \ : |
  .   ;   /  ` ; .'___,/    ,'.--'.  '   \' .
  ;   |  ; \ ; | |    :     |/___/ \ |    ' '
  |   :  | ; | ' ;    |.';  ;;   \  \;      :
  .   |  ' ' ' : `----'  |  | \   ;  `      |
  '   ;  \; /  |     '   :  ;  .   \    .\  ;
   \   \  ',  /      |   |  '   \   \   ' \ |
    ;   :    /       '   :  |    :   '  |--"
     \   \ .'        ;   |.'      \   \ ;
  www. `---` ver     '---' he       '---" ire.org


Welcome to OverTheWire!

If you find any problems, please report them to the #wargames channel on
discord or IRC.

--[ Playing the games ]--

  This machine might hold several wargames.
  If you are playing "somegame", then:
```

```
level1: ZjLjTmM6FvvyRnrb2rfNWOZOTa6ip5If
level2: 263JGJPfgU6LtdEvgfWU1XP5yac29mFx
level3: MNk8KNH3Usiio41PRUEoDFPqfxLPlSmx
level4: 2WmrDFRmJIq3IPxneAaMGhap0pFhF3NJ
level5: 4oQYVPkxZOOEOO5pTW81FB8j8lxXGUQw
level6: HWasnPhtq9AVKe0dmk45nxy20cvUa6EG
level7: morbNTDkSW6jIlUc0ymOdMaLnOlFVAaj
level8: dfwvzFQi4mU0wfNbFOe9RoWskMLg7eEc
level9: 4CKMh1JI91bUIZZPXDqGanal4xvAg0JM
level10: FGUW5ilLVJrxX9kMYMmlN4MgbpfMiqey
level11: dtR173fZKb0RRsDFSGsg2RWnpNVj3qRr
level12: 7x16WNeHIi5YkIhWsfFIqoognUTyj9Q4
level13: FO5dwFsc0cbaIiH0h8J2eUks2vdTDwAn
level14: MU4VWeTyJk8ROof1qqmcBPaLh7lDCPvS
level15: 8xCjnmgoKbGLhHFAZlGE5Tmu4M2tKJQo
level16: kSkvUpMQ7lBYyCM4GBPvCvT1BfWRy0Dx
level17: EReVavePLFHtFlFsjn3hyzMlvSuSAcRD
level18: x2gLTTjFwMOhQ8oWNbMN362QKxfRqGlO
level19: cGWpMaKXVwDUNgPAVJbWYuGHVn9zl3j8
level20: 0qXahG8ZjOVMN9Ghs7iOWsCfZyXOUbYO
level21: EeoULMCra2q0dSkYj561DX7s1CpBuOBt
level22: tRae0UfB9v0UzbCdn9cY0gQnds9GF58Q
level23: 0Zf11ioIjMVN551jX3CmStKLYqjk54Ga
level24: gb8KRRCsshuZXI0tUuR6ypOFjiZbf3G8
level25: iCi86ttT4KSNe1armKiwbQNmB3YJP3q4
level26:
level27:
level28:
level29:
level30:
level31:
level32:
level33:
level34:
```

23 July, 24


KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
KaliLinux
Metasploitable2-Linux
14:33
bandit25@bandit: ~
File Actions Edit View Help

```
--[ More information ]--

  For more information regarding individual wargames, visit
  http://www.overthewire.org/wargames/

  For support, questions or comments, contact us on discord or IRC.

  Enjoy your stay!
```

Bandit Level 25 → Level 26

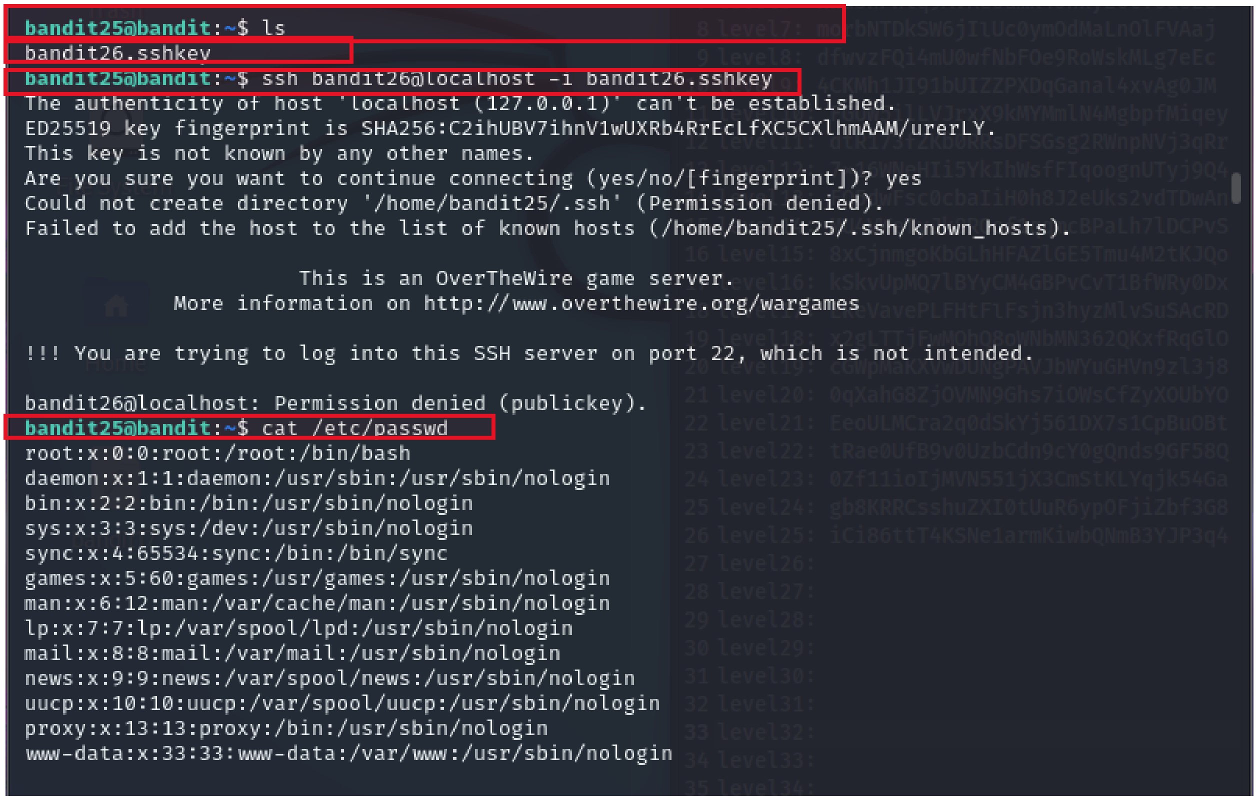
Level Goal

Logging in to bandit26 from bandit25 should be fairly easy… The shell for user bandit26 is not **/bin/bash**, but something else. Find out what it is, how it works and how to break out of it.

Commands you may need to solve this level

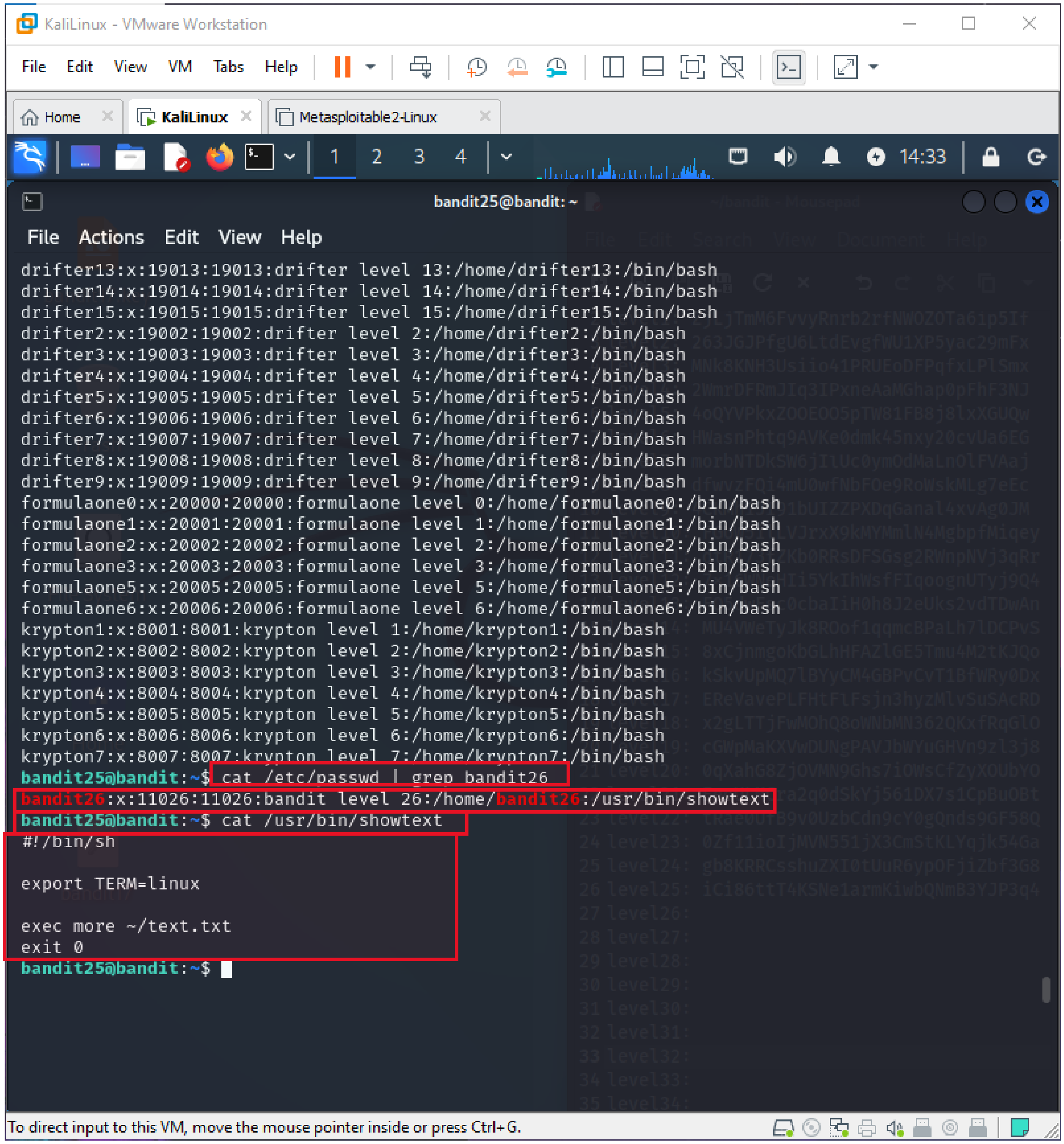
ssh, cat, more, vi, ls, id, pwd

23 July, 24



```
bandit25@bandit:~$ ls
bandit26.sshkey
bandit25@bandit:~$ ssh bandit26@localhost -i bandit26.sshkey
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ED25519 key fingerprint is SHA256:C2ihUBV7ihnV1wUXRb4RrEcLfXC5CXlhmAAM/urerLY.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Could not create directory '/home/bandit25/.ssh' (Permission denied).
Failed to add the host to the list of known hosts (/home/bandit25/.ssh/known_hosts).

                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

!!! You are trying to log into this SSH server on port 22, which is not intended.

bandit26@localhost: Permission denied (publickey).
bandit25@bandit:~$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
```

23 July, 24



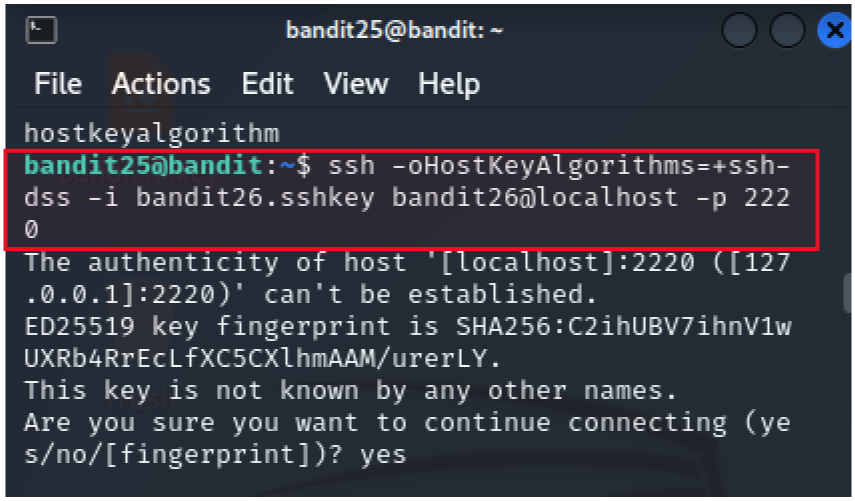
KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
KaliLinux
Metasploitable2-Linux
1 2 3 4
14:33
bandit25@bandit: ~
File Actions Edit View Help

```
drifter13:x:19013:19013:drifter level 13:/home/drifter13:/bin/bash
drifter14:x:19014:19014:drifter level 14:/home/drifter14:/bin/bash
drifter15:x:19015:19015:drifter level 15:/home/drifter15:/bin/bash
drifter2:x:19002:19002:drifter level 2:/home/drifter2:/bin/bash
drifter3:x:19003:19003:drifter level 3:/home/drifter3:/bin/bash
drifter4:x:19004:19004:drifter level 4:/home/drifter4:/bin/bash
drifter5:x:19005:19005:drifter level 5:/home/drifter5:/bin/bash
drifter6:x:19006:19006:drifter level 6:/home/drifter6:/bin/bash
drifter7:x:19007:19007:drifter level 7:/home/drifter7:/bin/bash
drifter8:x:19008:19008:drifter level 8:/home/drifter8:/bin/bash
drifter9:x:19009:19009:drifter level 9:/home/drifter9:/bin/bash
formulaone0:x:20000:20000:formulaone level 0:/home/formulaone0:/bin/bash
formulaone1:x:20001:20001:formulaone level 1:/home/formulaone1:/bin/bash
formulaone2:x:20002:20002:formulaone level 2:/home/formulaone2:/bin/bash
formulaone3:x:20003:20003:formulaone level 3:/home/formulaone3:/bin/bash
formulaone5:x:20005:20005:formulaone level 5:/home/formulaone5:/bin/bash
formulaone6:x:20006:20006:formulaone level 6:/home/formulaone6:/bin/bash
krypton1:x:8001:8001:krypton level 1:/home/krypton1:/bin/bash
krypton2:x:8002:8002:krypton level 2:/home/krypton2:/bin/bash
krypton3:x:8003:8003:krypton level 3:/home/krypton3:/bin/bash
krypton4:x:8004:8004:krypton level 4:/home/krypton4:/bin/bash
krypton5:x:8005:8005:krypton level 5:/home/krypton5:/bin/bash
krypton6:x:8006:8006:krypton level 6:/home/krypton6:/bin/bash
krypton7:x:8007:8007:krypton level 7:/home/krypton7:/bin/bash
bandit25@bandit:~$ cat /etc/passwd | grep bandit26
bandit26:x:11026:11026:bandit level 26:/home/bandit26:/usr/bin/showtext
bandit25@bandit:~$ cat /usr/bin/showtext
#!/bin/sh

export TERM=linux

exec more ~/text.txt
exit 0
bandit25@bandit:~$
```

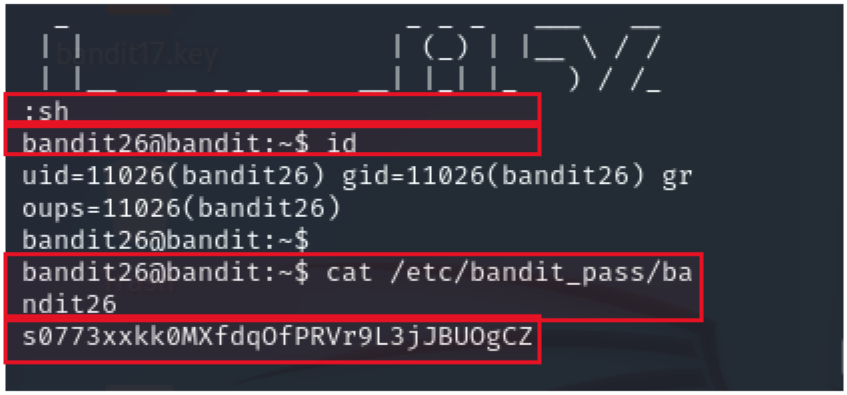
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

23 July, 24

Make screen size to be so small like this:



```
hostkeyalgorithm
bandit25@bandit:~$ ssh -oHostKeyAlgorithms=+ssh-
dss -i bandit26.sshkey bandit26@localhost -p 222
0
The authenticity of host '[localhost]:2220 ([127
.0.0.1]:2220)' can't be established.
ED25519 key fingerprint is SHA256:C2ihUBV7ihnV1w
UXRb4RrEcLfXC5CXlhmAAM/urerLY.
This key is not known by any other names.
Are you sure you want to continue connecting (ye
s/no/[fingerprint])? yes
```



```
:sh
bandit26@bandit:~$ id
uid=11026(bandit26) gid=11026(bandit26) gr
oups=11026(bandit26)
bandit26@bandit:~$
bandit26@bandit:~$ cat /etc/bandit_pass/ba
ndit26
s0773xxkk0MXfdqOfPRVr9L3jJBUOgCZ
```

Bandit Level 26 → Level 27

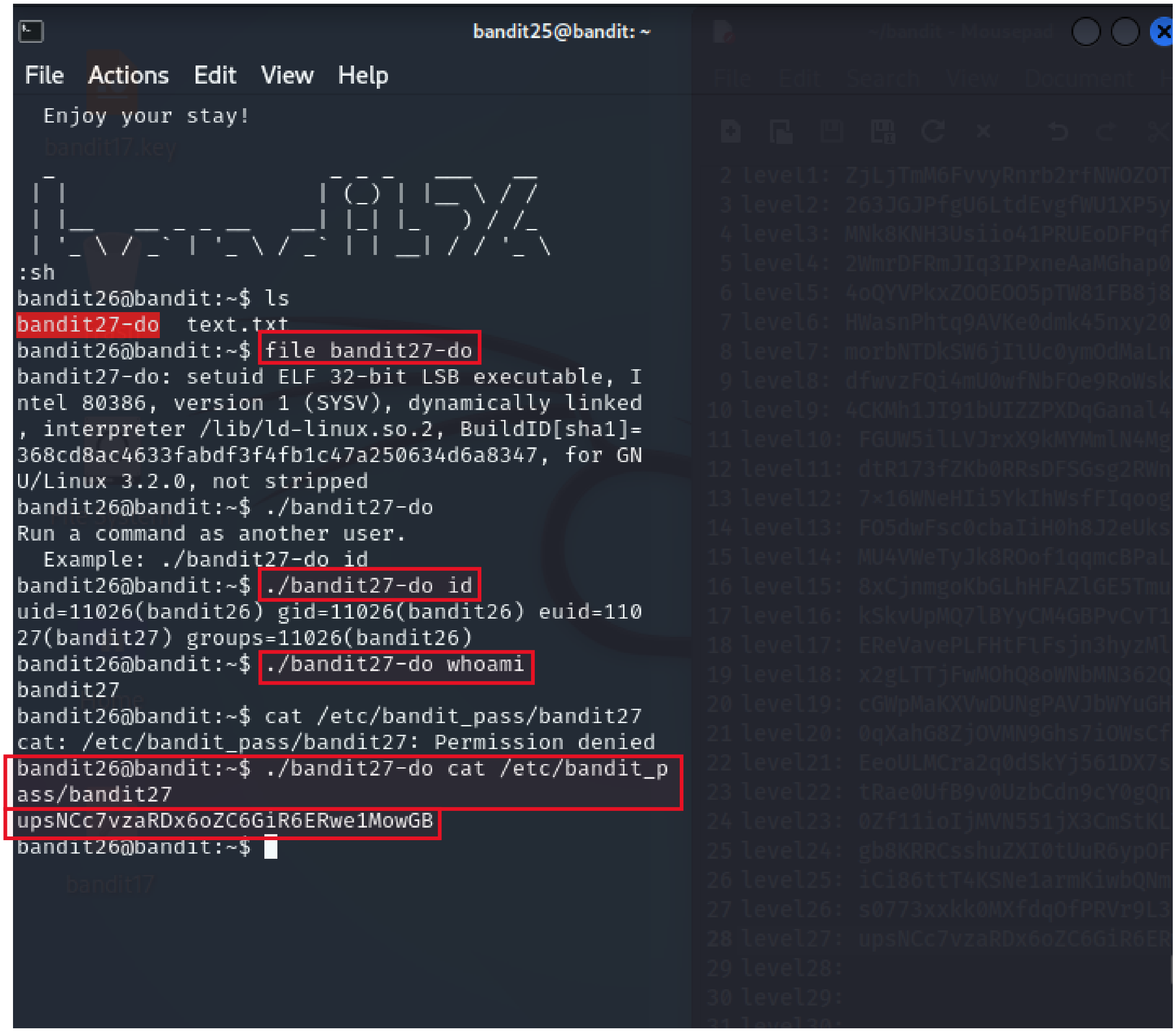
Level Goal

Good job getting a shell! Now hurry and grab the password for bandit27!

Commands you may need to solve this level

Ls

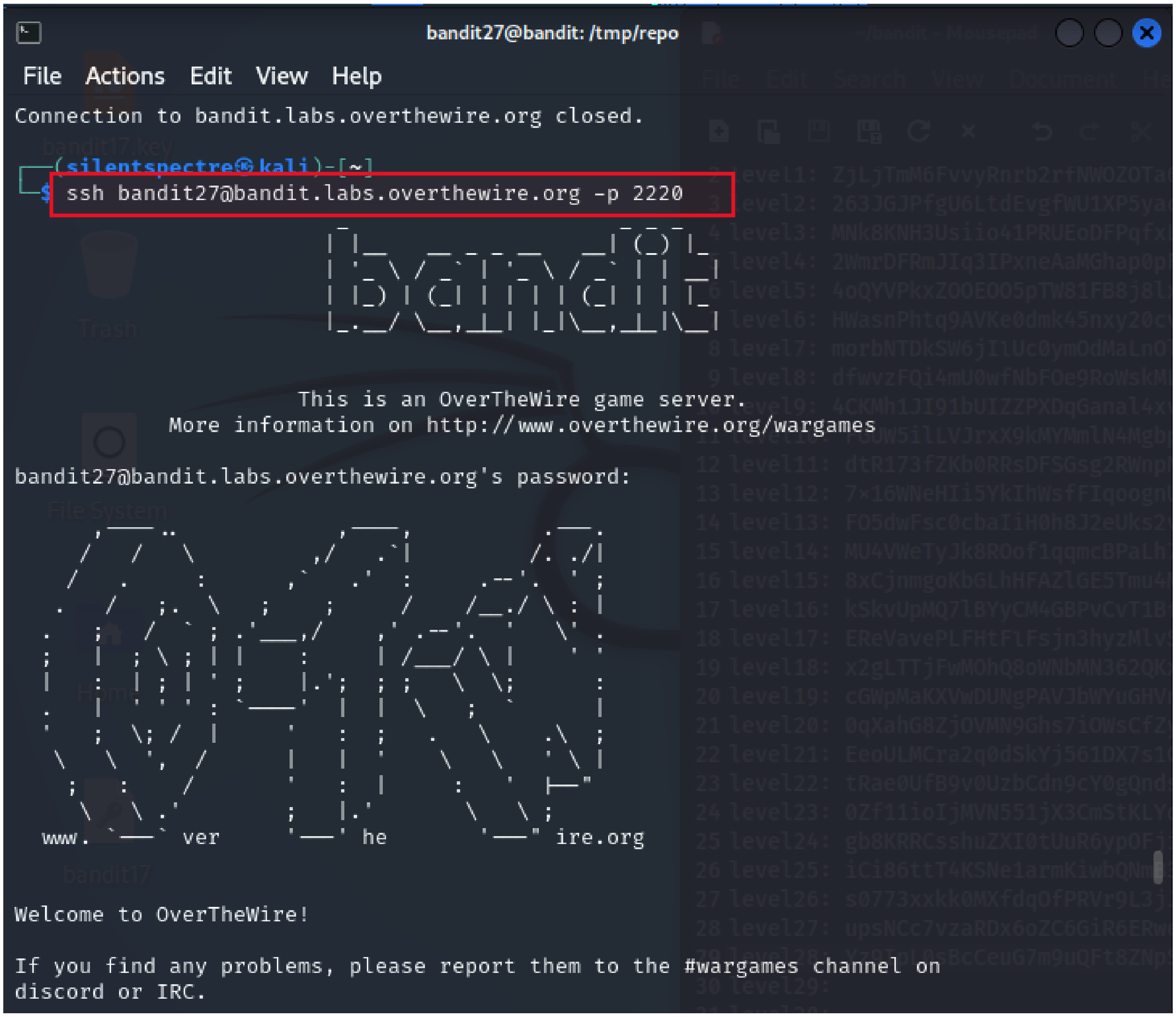
23 July, 24



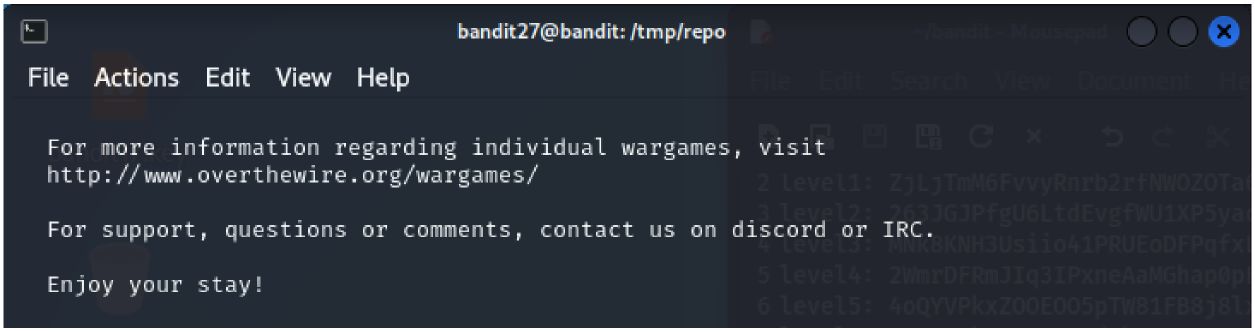
```
  Enjoy your stay!

  _                     _ _ _   ___   __
 | |                   | (_) | |__ \ / /
 | |__   __ _ _ __   __| |_| |_   ) / /_
 | '_ \ / _` | '_ \ / _` | | __| / / '_ \
:sh
bandit26@bandit:~$ ls
bandit27-do  text.txt
bandit26@bandit:~$ file bandit27-do
bandit27-do: setuid ELF 32-bit LSB executable, I
ntel 80386, version 1 (SYSV), dynamically linked
, interpreter /lib/ld-linux.so.2, BuildID[sha1]=
368cd8ac4633fabdf3f4fb1c47a250634d6a8347, for GN
U/Linux 3.2.0, not stripped
bandit26@bandit:~$ ./bandit27-do
Run a command as another user.
  Example: ./bandit27-do id
bandit26@bandit:~$ ./bandit27-do id
uid=11026(bandit26) gid=11026(bandit26) euid=110
27(bandit27) groups=11026(bandit26)
bandit26@bandit:~$ ./bandit27-do whoami
bandit27
bandit26@bandit:~$ cat /etc/bandit_pass/bandit27
cat: /etc/bandit_pass/bandit27: Permission denied
bandit26@bandit:~$ ./bandit27-do cat /etc/bandit_p
ass/bandit27
upsNCc7vzaRDx6oZC6GiR6ERwe1MowGB
bandit26@bandit:~$ 
```

```
level1: ZjLjTmM6FvvyRnrb2rfNWOZOT
level2: 263JGJPfgU6LtdEvgfWU1XP5y
level3: MNk8KNH3Usiio41PRUEoDFPqf
level4: 2WmrDFRmJIq3IPxneAaMGhap0
level5: 4oQYVPkxZOOEOO5pTW81FB8j8
level6: HWasnPhtq9AVKe0dmk45nxy20
level7: morbNTDkSW6jIlUc0ymOdMaLn
level8: dfwvzFQi4mU0wfNbFOe9RoWsk
level9: 4CKMh1JI91bUIZZPXDqGanal4
level10: FGUW5ilLVJrxX9kMYMmlN4Mg
level11: dtR173fZKb0RRsDFSGsg2RWn
level12: 7x16WNeHIi5YkIhWsfFIqoog
level13: FO5dwFsc0cbaIiH0h8J2eUks
level14: MU4VWeTyJk8ROof1qqmcBPaL
level15: 8xCjnmgoKbGLhHFAZlGE5Tmu
level16: kSkvUpMQ7lBYyCM4GBPvCvT1
level17: EReVavePLFHtFlFsjn3hyzMl
level18: x2gLTTjFwMOhQ8oWNbMN362Q
level19: cGWpMaKXVwDUNgPAVJbWYuGH
level20: 0qXahG8ZjOVMN9Ghs7iOWsCf
level21: EeoULMCra2q0dSkYj561DX7s
level22: tRae0UfB9v0UzbCdn9cY0gQn
level23: 0Zf11ioIjMVN551jX3CmStKL
level24: gb8KRRCsshuZXI0tUuR6ypOF
level25: iCi86ttT4KSNe1armKiwbQNm
level26: s0773xxkk0MXfdqOfPRVr9L3
level27: upsNCc7vzaRDx6oZC6GiR6ER
level28:
level29:
level30:
```

23 July, 24



```
Connection to bandit.labs.overthewire.org closed.

┌──(silentspectre㉿kali)-[~]
└─$ ssh bandit27@bandit.labs.overthewire.org -p 2220
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|


                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit27@bandit.labs.overthewire.org's password:

      ,----..            ,----,          .---.
     /   /   \         ,/   .`|         /. ./|
    /   .     :      ,`   .'  :     .--'.  ' ;
   .   /   ;.  \   ;    ;     /    /__./ \ : |
  .   ;   /  ` ; .'___,/    ,' .--'.  '   \' .
  ;   |  ; \ ; | |    :     | /___/ \ |    ' '
  |   :  | ; | ' ;    |.';  ; ;   \  \;      :
  .   |  ' ' ' : `----'  |  |  \   ;  `      |
  '   ;  \; /  |     '   :  ;   .   \    .\  ;
   \   \  ',  /      |   |  '    \   \   ' \ |
    ;   :    /       '   :  |     :   '  |--"
     \   \ .'        ;   |.'       \   \ ;
  www. `---` ver     '---' he       '---" ire.org


Welcome to OverTheWire!

If you find any problems, please report them to the #wargames channel on
discord or IRC.
```



```
  For more information regarding individual wargames, visit
  http://www.overthewire.org/wargames/

  For support, questions or comments, contact us on discord or IRC.

  Enjoy your stay!
```

Bandit Level 27 → Level 28

Level Goal

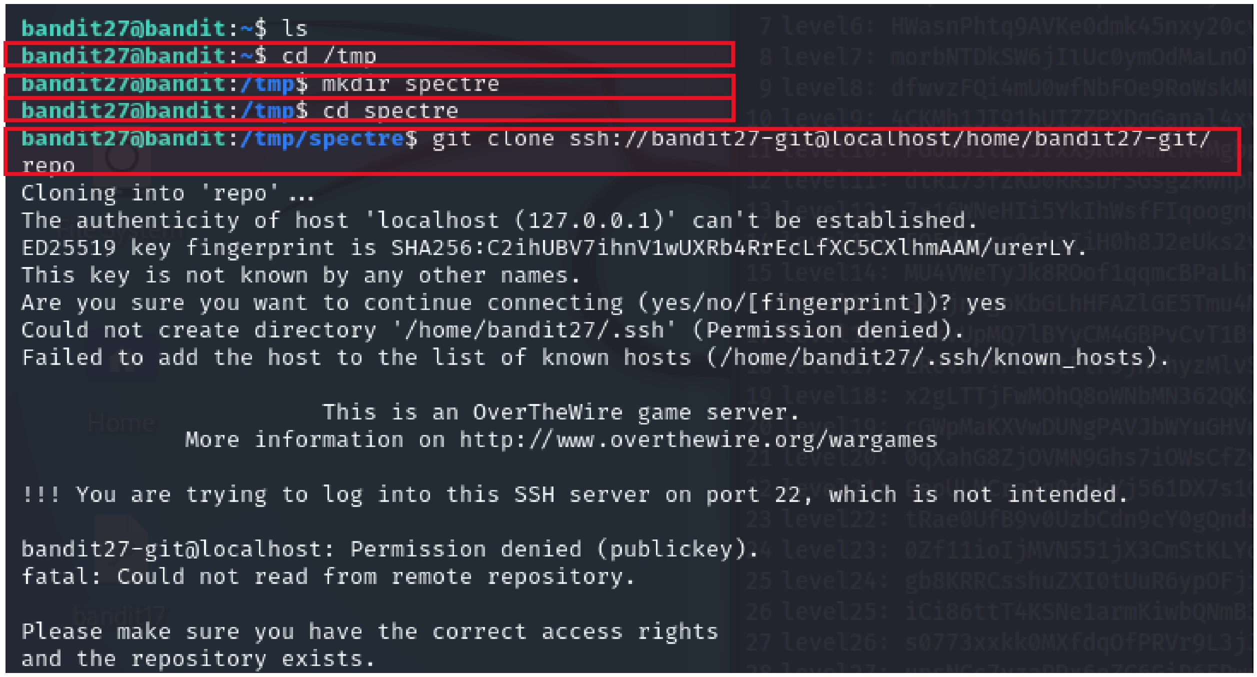
23 July, 24

There is a git repository at ssh://bandit27-git@localhost/home/bandit27-git/repo via the port 2220. The password for the user bandit27-git is the same as for the user bandit27.

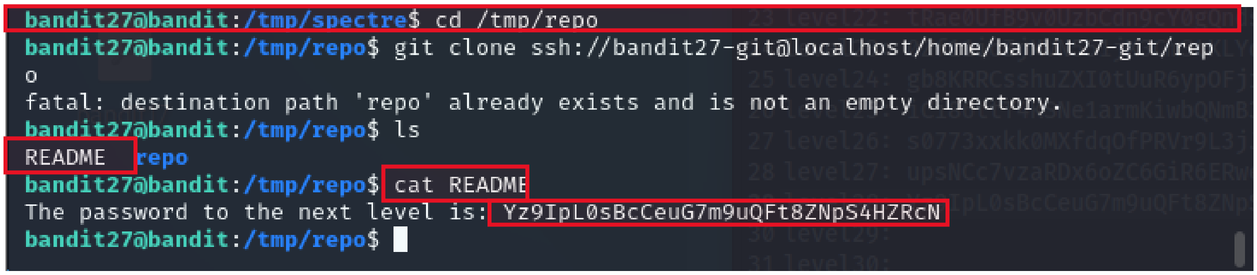
Clone the repository and find the password for the next level.

Commands you may need to solve this level

git

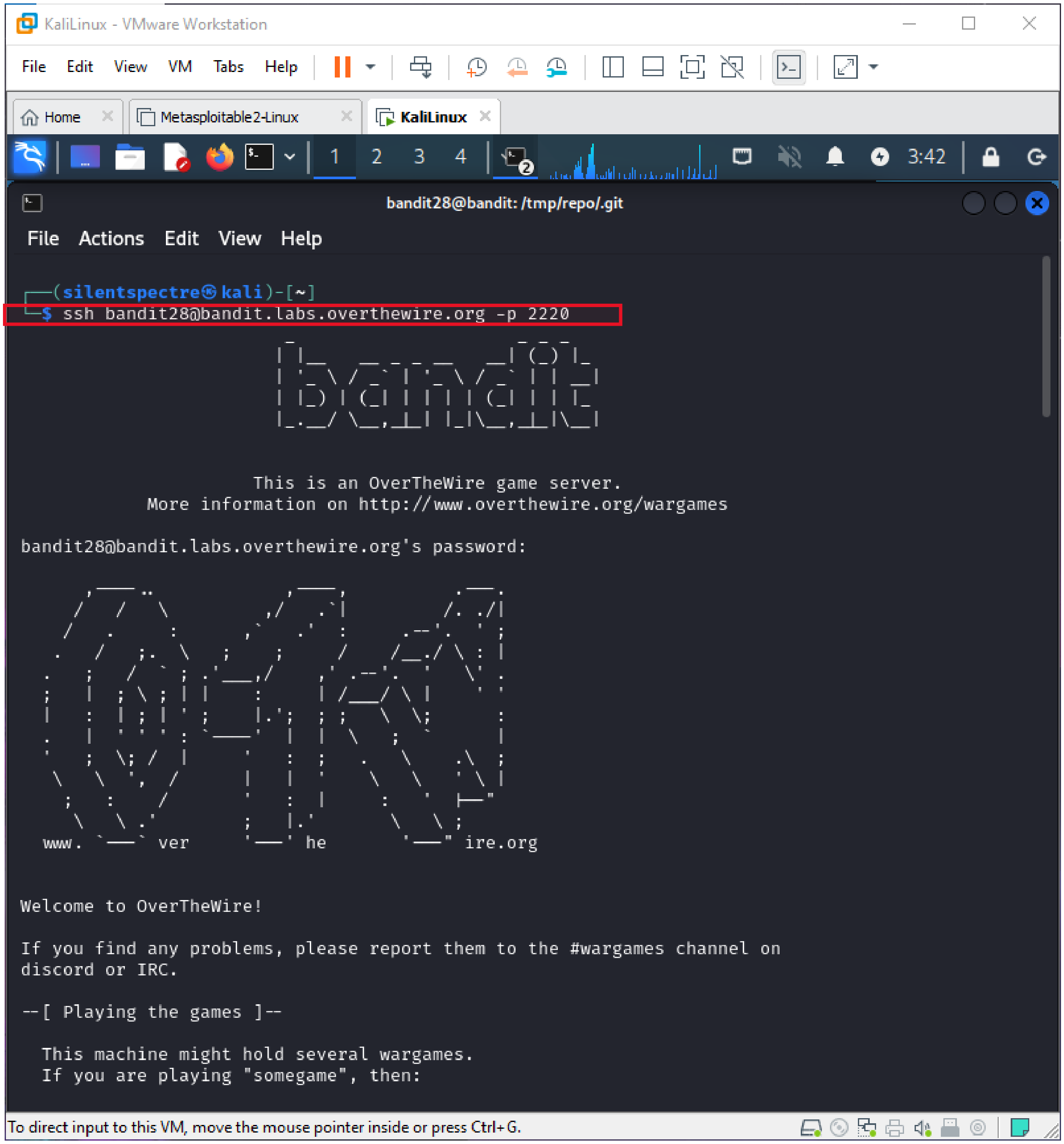


```
bandit27@bandit:~$ ls
bandit27@bandit:~$ cd /tmp
bandit27@bandit:/tmp$ mkdir spectre
bandit27@bandit:/tmp$ cd spectre
bandit27@bandit:/tmp/spectre$ git clone ssh://bandit27-git@localhost/home/bandit27-git/
repo
Cloning into 'repo'...
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ED25519 key fingerprint is SHA256:C2ihUBV7ihnV1wUXRb4RrEcLfXC5CXlhmAAM/urerLY.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Could not create directory '/home/bandit27/.ssh' (Permission denied).
Failed to add the host to the list of known hosts (/home/bandit27/.ssh/known_hosts).

                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

!!! You are trying to log into this SSH server on port 22, which is not intended.

bandit27-git@localhost: Permission denied (publickey).
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.
```



```
bandit27@bandit:/tmp/spectre$ cd /tmp/repo
bandit27@bandit:/tmp/repo$ git clone ssh://bandit27-git@localhost/home/bandit27-git/rep
o
fatal: destination path 'repo' already exists and is not an empty directory.
bandit27@bandit:/tmp/repo$ ls
README  repo
bandit27@bandit:/tmp/repo$ cat README
The password to the next level is: Yz9IpL0sBcCeuG7m9uQFt8ZNpS4HZRcN
bandit27@bandit:/tmp/repo$ 
```

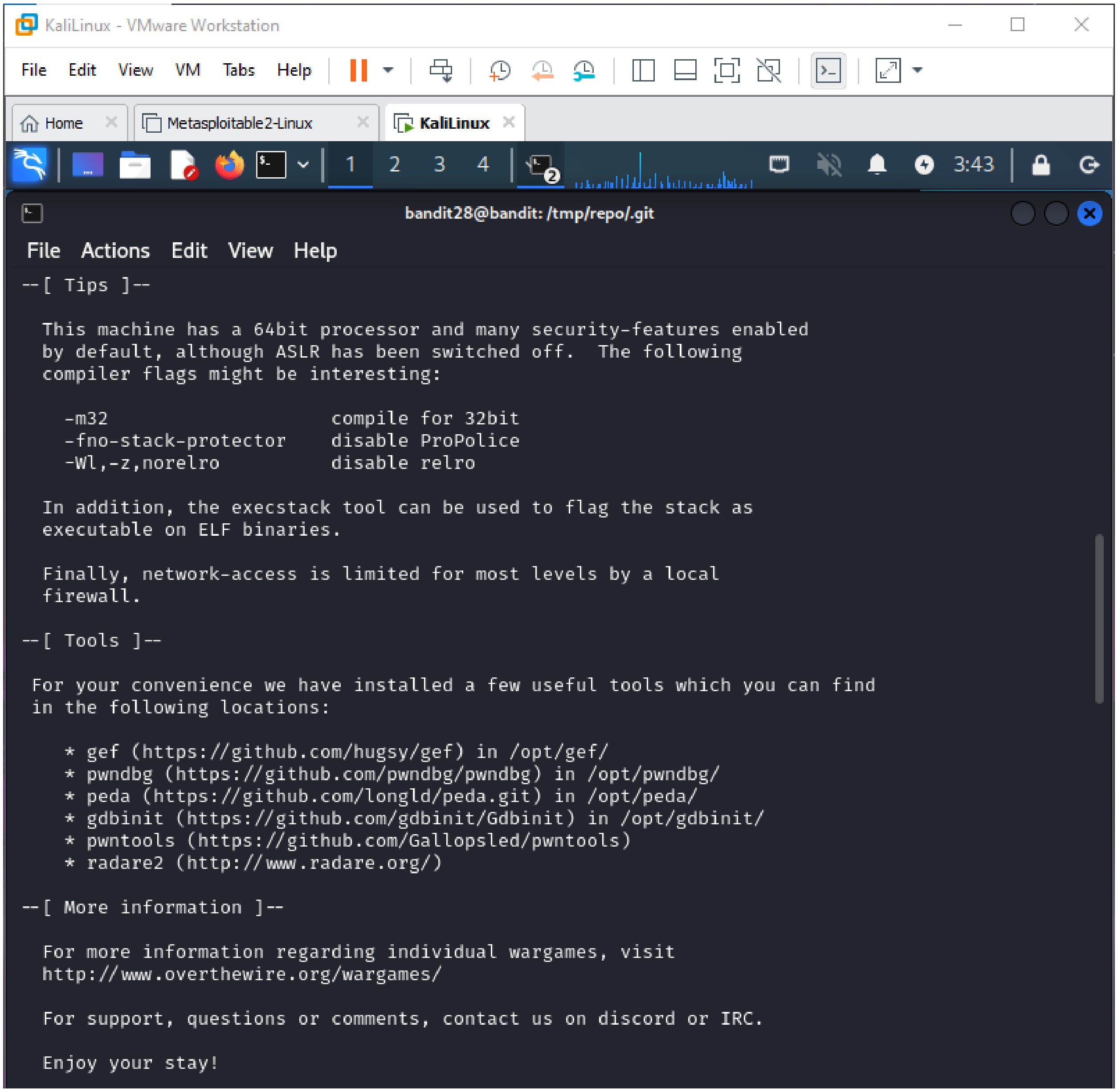
23 July, 24



KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
Metasploitable2-Linux
KaliLinux
1 2 3 4
3:42
bandit28@bandit: /tmp/repo/.git
File Actions Edit View Help
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

```
┌──(silentspectre㉿kali)-[~]
└─$ ssh bandit28@bandit.labs.overthewire.org -p 2220
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|


                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit28@bandit.labs.overthewire.org's password:

      ,----..            ,----,          .---.
     /   /   \         ,/   .`|         /. ./|
    /   .     :      ,`   .'  :     .--'.  ' ;
   .   /   ;.  \   ;    ;     /    /__./ \ : |
  .   ;   /  ` ; .'___,/    ,'    .'.  '   \' .
  ;   |  ; \ ; | |    :     |    /___/ \ |    ' '
  |   :  | ; | ' ;    |.';  ;    ;   \  \;      :
  .   |  ' ' ' : `----'  |  |     \   ;  `      |
  '   ;  \; /  |     '   :  ;      .   \    .\  ;
   \   \  ',  /      |   |  '       \   \   ' \ |
    ;   :    /       '   :  |        :   '  |--"
     \   \ .'        ;   |.'          \   \ ;
  www. `---` ver     '---' he          '---" ire.org


Welcome to OverTheWire!

If you find any problems, please report them to the #wargames channel on
discord or IRC.

--[ Playing the games ]--

  This machine might hold several wargames.
  If you are playing "somegame", then:
```

23 July, 24


KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
Metasploitable2-Linux
KaliLinux
1 2 3 4
3:43
bandit28@bandit: /tmp/repo/.git
File Actions Edit View Help

```
--[ Tips ]--

  This machine has a 64bit processor and many security-features enabled
  by default, although ASLR has been switched off.  The following
  compiler flags might be interesting:

    -m32                    compile for 32bit
    -fno-stack-protector    disable ProPolice
    -Wl,-z,norelro          disable relro

  In addition, the execstack tool can be used to flag the stack as
  executable on ELF binaries.

  Finally, network-access is limited for most levels by a local
  firewall.

--[ Tools ]--

 For your convenience we have installed a few useful tools which you can find
 in the following locations:

    * gef (https://github.com/hugsy/gef) in /opt/gef/
    * pwndbg (https://github.com/pwndbg/pwndbg) in /opt/pwndbg/
    * peda (https://github.com/longld/peda.git) in /opt/peda/
    * gdbinit (https://github.com/gdbinit/Gdbinit) in /opt/gdbinit/
    * pwntools (https://github.com/Gallopsled/pwntools)
    * radare2 (http://www.radare.org/)

--[ More information ]--

  For more information regarding individual wargames, visit
  http://www.overthewire.org/wargames/

  For support, questions or comments, contact us on discord or IRC.

  Enjoy your stay!
```

Bandit Level 28 → Level 29

Level Goal

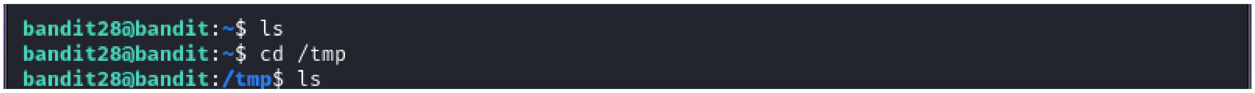
There is a git repository at ssh://bandit28-git@localhost/home/bandit28-git/repo via the port 2220. The password for the user bandit28-git is the same as for the user bandit28.

Clone the repository and find the password for the next level.

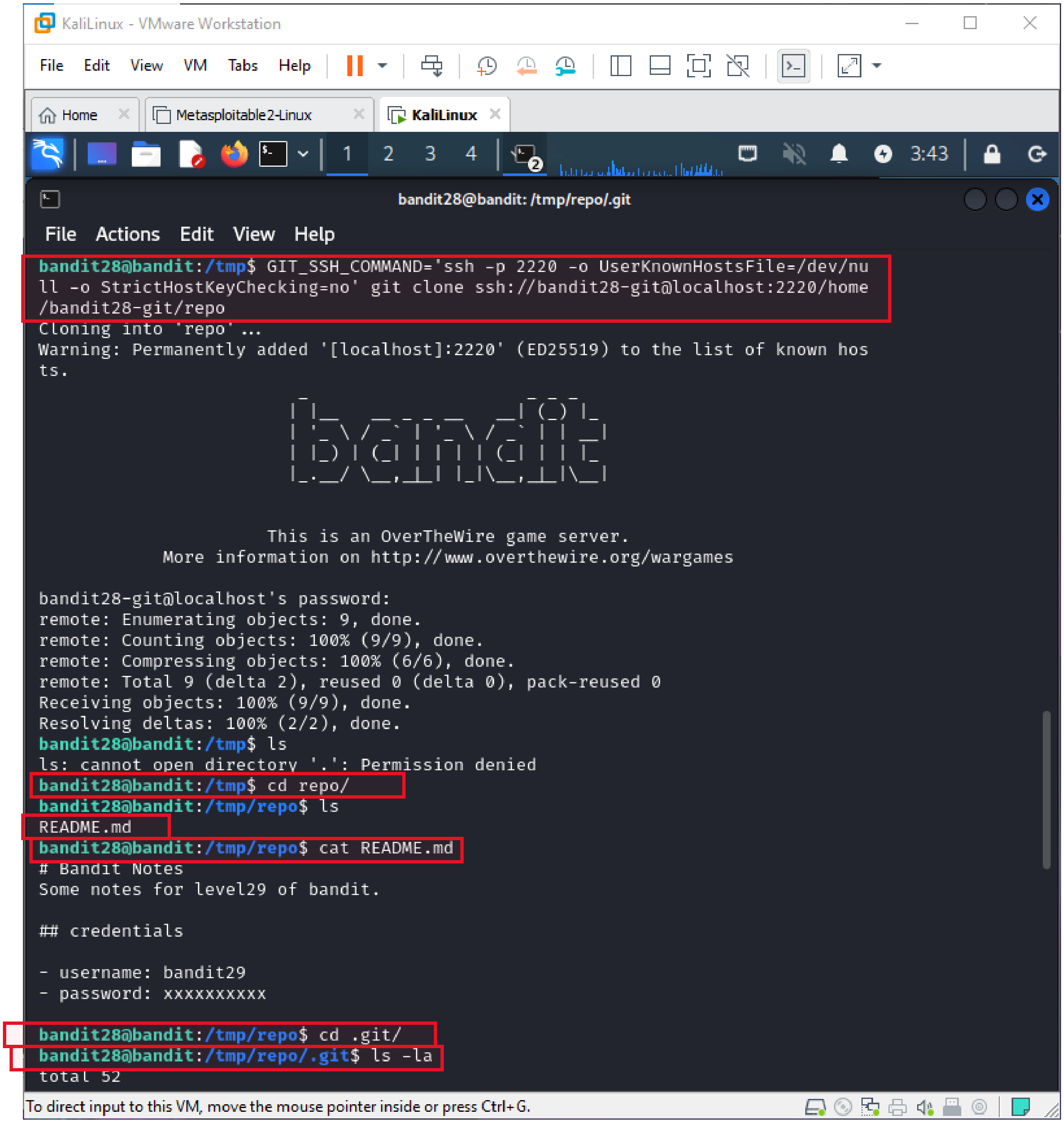
Commands you may need to solve this level

23 July, 24

git

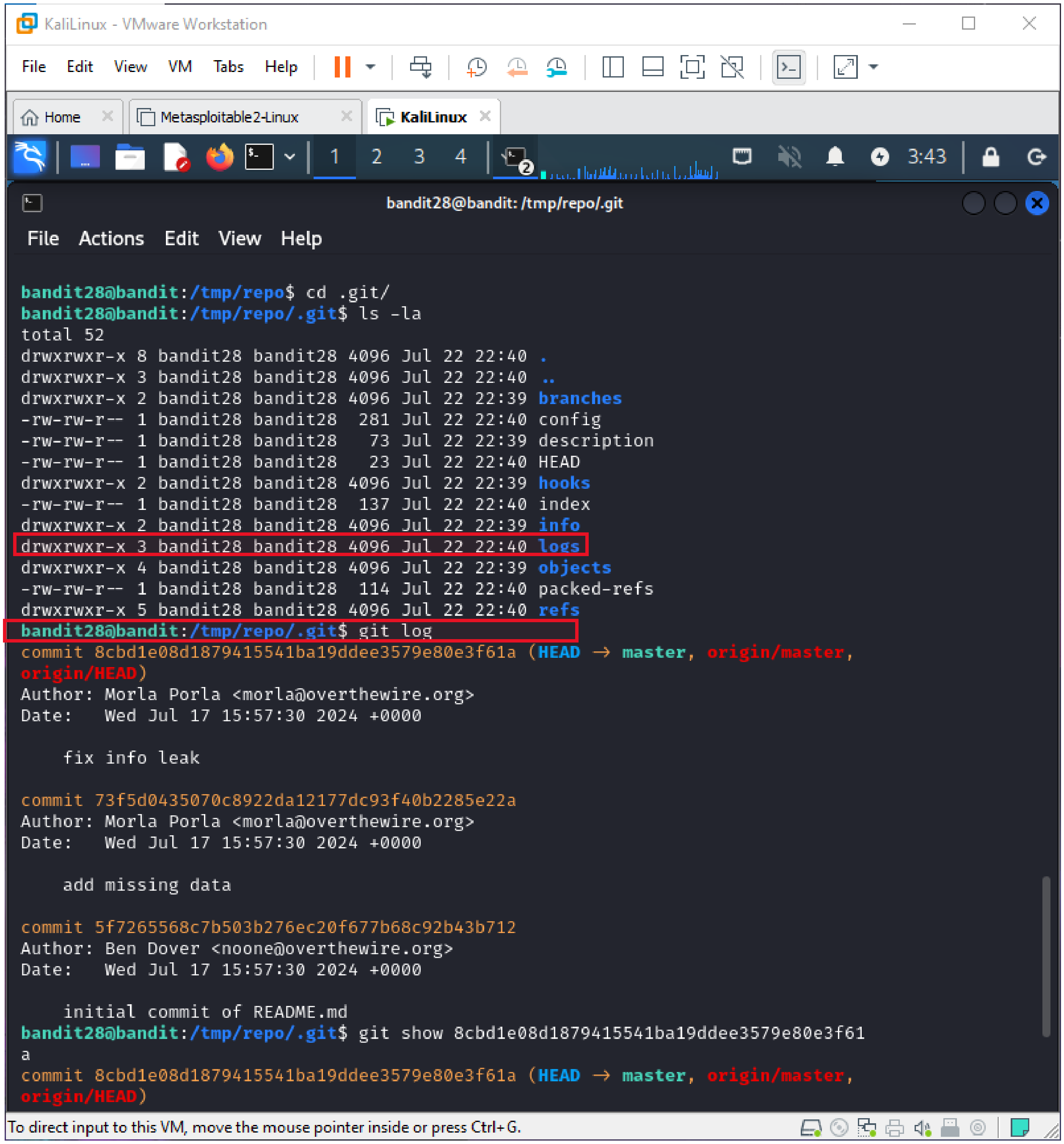


```
bandit28@bandit:~$ ls
bandit28@bandit:~$ cd /tmp
bandit28@bandit:/tmp$ ls
```


KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
Metasploitable2-Linux
KaliLinux
1 2 3 4
3:43
bandit28@bandit: /tmp/repo/.git
File Actions Edit View Help
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

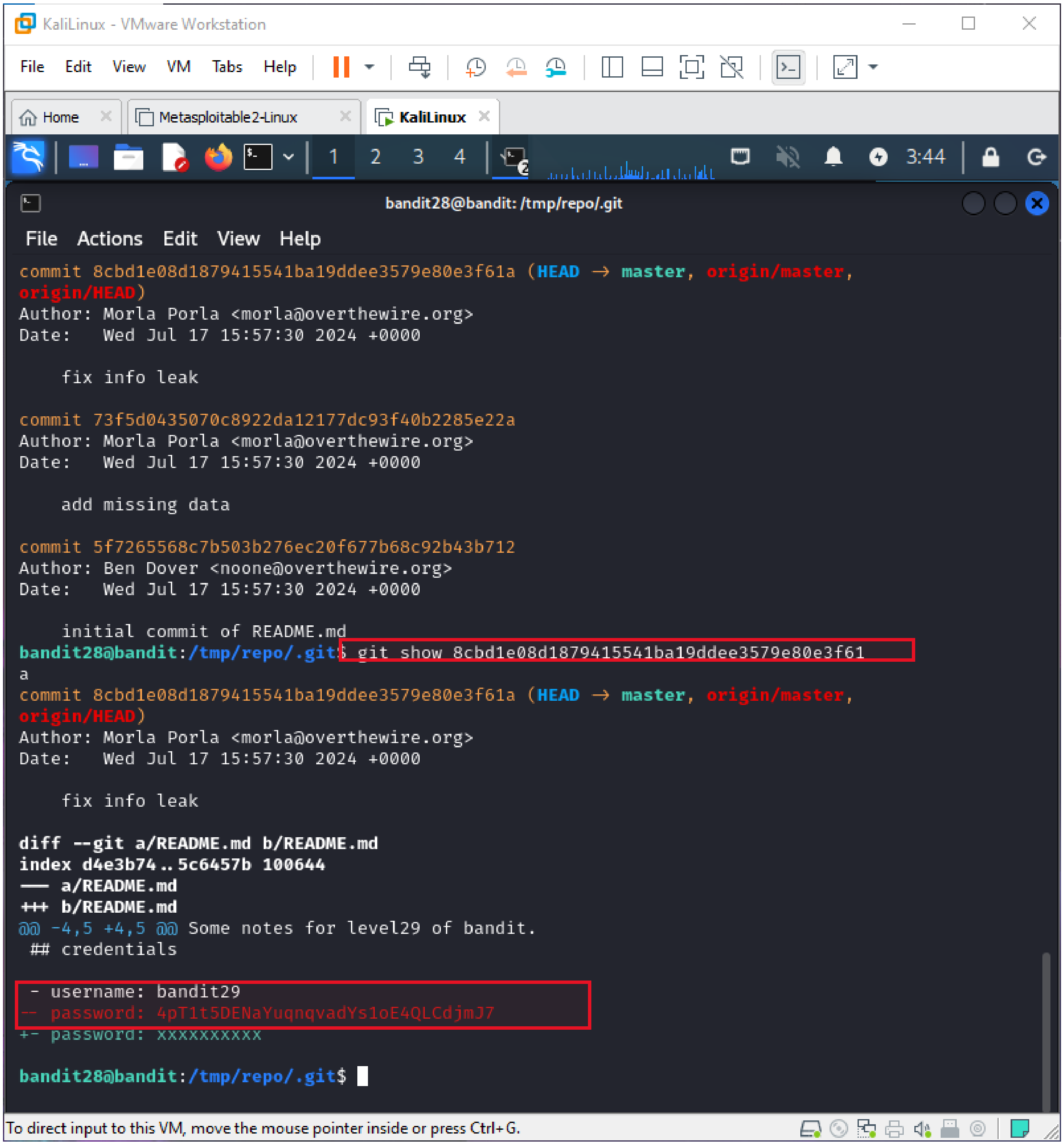
```
bandit28@bandit:/tmp$ GIT_SSH_COMMAND='ssh -p 2220 -o UserKnownHostsFile=/dev/nu
ll -o StrictHostKeyChecking=no' git clone ssh://bandit28-git@localhost:2220/home
/bandit28-git/repo
Cloning into 'repo'...
Warning: Permanently added '[localhost]:2220' (ED25519) to the list of known hos
ts.
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|


                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit28-git@localhost's password:
remote: Enumerating objects: 9, done.
remote: Counting objects: 100% (9/9), done.
remote: Compressing objects: 100% (6/6), done.
remote: Total 9 (delta 2), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (9/9), done.
Resolving deltas: 100% (2/2), done.
bandit28@bandit:/tmp$ ls
ls: cannot open directory '.': Permission denied
bandit28@bandit:/tmp$ cd repo/
bandit28@bandit:/tmp/repo$ ls
README.md
bandit28@bandit:/tmp/repo$ cat README.md
# Bandit Notes
Some notes for level29 of bandit.

## credentials

- username: bandit29
- password: xxxxxxxxxx

bandit28@bandit:/tmp/repo$ cd .git/
bandit28@bandit:/tmp/repo/.git$ ls -la
total 52
```

23 July, 24


KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
Metasploitable2-Linux
KaliLinux
1 2 3 4
3:43
bandit28@bandit: /tmp/repo/.git
File Actions Edit View Help
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

```
bandit28@bandit:/tmp/repo$ cd .git/
bandit28@bandit:/tmp/repo/.git$ ls -la
total 52
drwxrwxr-x 8 bandit28 bandit28 4096 Jul 22 22:40 .
drwxrwxr-x 3 bandit28 bandit28 4096 Jul 22 22:40 ..
drwxrwxr-x 2 bandit28 bandit28 4096 Jul 22 22:39 branches
-rw-rw-r-- 1 bandit28 bandit28  281 Jul 22 22:40 config
-rw-rw-r-- 1 bandit28 bandit28   73 Jul 22 22:39 description
-rw-rw-r-- 1 bandit28 bandit28   23 Jul 22 22:40 HEAD
drwxrwxr-x 2 bandit28 bandit28 4096 Jul 22 22:39 hooks
-rw-rw-r-- 1 bandit28 bandit28  137 Jul 22 22:40 index
drwxrwxr-x 2 bandit28 bandit28 4096 Jul 22 22:39 info
drwxrwxr-x 3 bandit28 bandit28 4096 Jul 22 22:40 logs
drwxrwxr-x 4 bandit28 bandit28 4096 Jul 22 22:39 objects
-rw-rw-r-- 1 bandit28 bandit28  114 Jul 22 22:40 packed-refs
drwxrwxr-x 5 bandit28 bandit28 4096 Jul 22 22:40 refs
bandit28@bandit:/tmp/repo/.git$ git log
commit 8cbd1e08d1879415541ba19ddee3579e80e3f61a (HEAD → master, origin/master,
origin/HEAD)
Author: Morla Porla <morla@overthewire.org>
Date:   Wed Jul 17 15:57:30 2024 +0000

    fix info leak

commit 73f5d0435070c8922da12177dc93f40b2285e22a
Author: Morla Porla <morla@overthewire.org>
Date:   Wed Jul 17 15:57:30 2024 +0000

    add missing data

commit 5f7265568c7b503b276ec20f677b68c92b43b712
Author: Ben Dover <noone@overthewire.org>
Date:   Wed Jul 17 15:57:30 2024 +0000

    initial commit of README.md
bandit28@bandit:/tmp/repo/.git$ git show 8cbd1e08d1879415541ba19ddee3579e80e3f61
a
commit 8cbd1e08d1879415541ba19ddee3579e80e3f61a (HEAD → master, origin/master,
origin/HEAD)
```

23 July, 24



KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
Metasploitable2-Linux
KaliLinux
1 2 3 4
3:44
bandit28@bandit: /tmp/repo/.git
File Actions Edit View Help

```
commit 8cbd1e08d1879415541ba19ddee3579e80e3f61a (HEAD → master, origin/master,
origin/HEAD)
Author: Morla Porla <morla@overthewire.org>
Date:   Wed Jul 17 15:57:30 2024 +0000

    fix info leak

commit 73f5d0435070c8922da12177dc93f40b2285e22a
Author: Morla Porla <morla@overthewire.org>
Date:   Wed Jul 17 15:57:30 2024 +0000

    add missing data

commit 5f7265568c7b503b276ec20f677b68c92b43b712
Author: Ben Dover <noone@overthewire.org>
Date:   Wed Jul 17 15:57:30 2024 +0000

    initial commit of README.md
bandit28@bandit:/tmp/repo/.git$ git show 8cbd1e08d1879415541ba19ddee3579e80e3f61
a
commit 8cbd1e08d1879415541ba19ddee3579e80e3f61a (HEAD → master, origin/master,
origin/HEAD)
Author: Morla Porla <morla@overthewire.org>
Date:   Wed Jul 17 15:57:30 2024 +0000

    fix info leak

diff --git a/README.md b/README.md
index d4e3b74..5c6457b 100644
--- a/README.md
+++ b/README.md
@@ -4,5 +4,5 @@ Some notes for level29 of bandit.
 ## credentials

 - username: bandit29
-- password: 4pT1t5DENaYuqnqvadYs1oE4QLCdjmJ7
+- password: xxxxxxxxxx

bandit28@bandit:/tmp/repo/.git$ 
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

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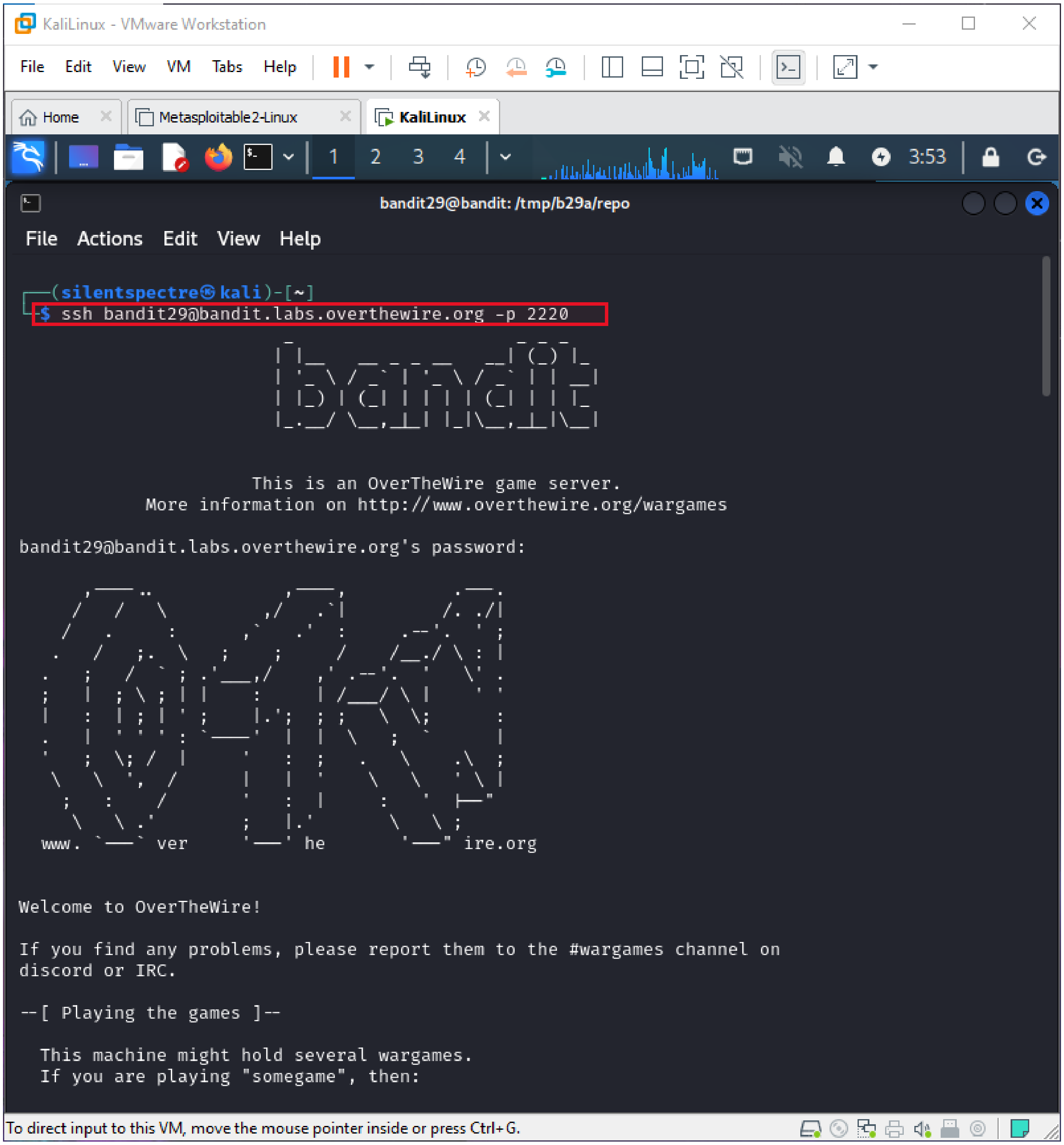
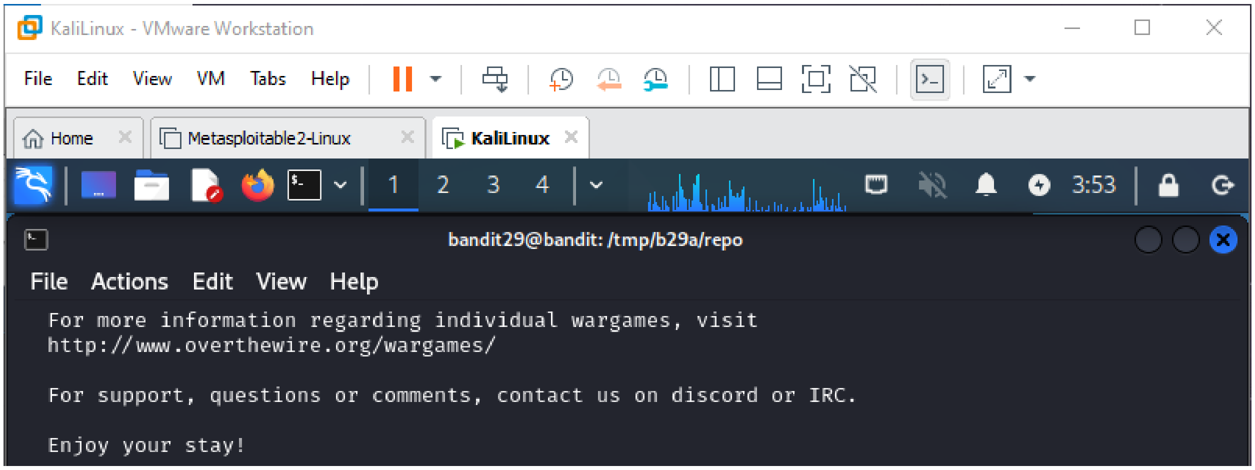

KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
Metasploitable2-Linux
KaliLinux
1 2 3 4
3:53
bandit29@bandit: /tmp/b29a/repo
File Actions Edit View Help
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

```
┌──(silentspectre㉿kali)-[~]
└─$ ssh bandit29@bandit.labs.overthewire.org -p 2220
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|


                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit29@bandit.labs.overthewire.org's password:

      ,----..            ,----,          .---.
     /   /   \         ,/   .`|         /. ./|
    /   .     :      ,`   .'  :     .--'.  ' ;
   .   /   ;.  \   ;    ;     /    /__./ \ : |
  .   ;   /  ` ; .'___,/    ,'.--'.  '   \' .
  ;   |  ; \ ; | |    :     |/___/ \ |    ' '
  |   :  | ; | ' ;    |.';  ;;   \  \;      :
  .   |  ' ' ' : `----'  |  | \   ;  `      |
  '   ;  \; /  |     '   :  ;  .   \    .\  ;
   \   \  ',  /      |   |  '   \   \   ' \ |
    ;   :    /       '   :  |    :   '  |--"
     \   \ .'        ;   |.'      \   \ ;
  www. `---` ver     '---' he      '---" ire.org


Welcome to OverTheWire!

If you find any problems, please report them to the #wargames channel on
discord or IRC.

--[ Playing the games ]--

  This machine might hold several wargames.
  If you are playing "somegame", then:
```

23 July, 24


KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
Metasploitable2-Linux
KaliLinux
1 2 3 4
3:53
bandit29@bandit: /tmp/b29a/repo
File Actions Edit View Help

```
For more information regarding individual wargames, visit
http://www.overthewire.org/wargames/

For support, questions or comments, contact us on discord or IRC.

Enjoy your stay!
```

Bandit Level 29 → Level 30

Level Goal

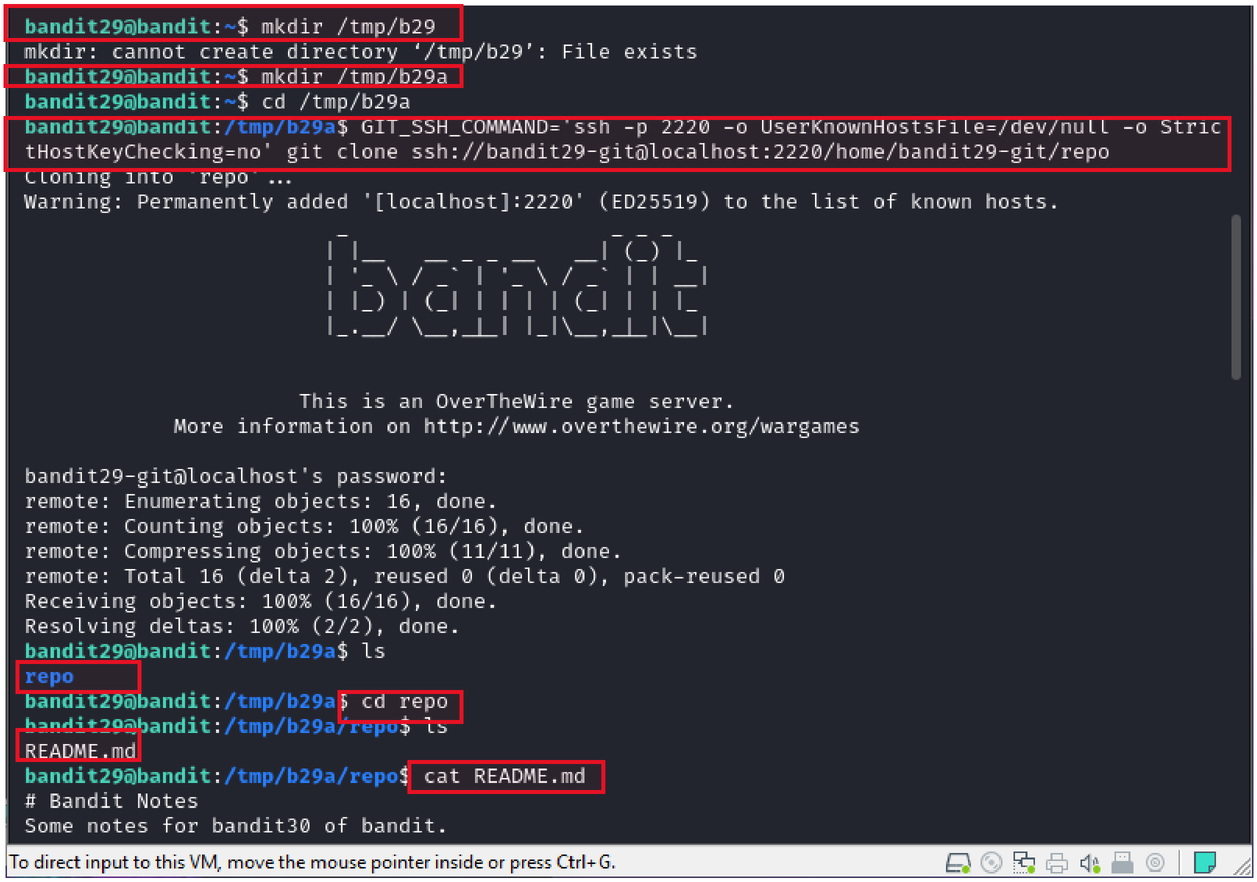
There is a git repository at ssh://bandit29-git@localhost/home/bandit29-git/repo via the port 2220. The password for the user bandit29-git is the same as for the user bandit29.

Clone the repository and find the password for the next level.

Commands you may need to solve this level

git

23 July, 24



```
bandit29@bandit:~$ mkdir /tmp/b29
mkdir: cannot create directory ‘/tmp/b29’: File exists
bandit29@bandit:~$ mkdir /tmp/b29a
bandit29@bandit:~$ cd /tmp/b29a
bandit29@bandit:/tmp/b29a$ GIT_SSH_COMMAND='ssh -p 2220 -o UserKnownHostsFile=/dev/null -o Stric
tHostKeyChecking=no' git clone ssh://bandit29-git@localhost:2220/home/bandit29-git/repo
Cloning into 'repo'...
Warning: Permanently added '[localhost]:2220' (ED25519) to the list of known hosts.
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|


                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit29-git@localhost's password:
remote: Enumerating objects: 16, done.
remote: Counting objects: 100% (16/16), done.
remote: Compressing objects: 100% (11/11), done.
remote: Total 16 (delta 2), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (16/16), done.
Resolving deltas: 100% (2/2), done.
bandit29@bandit:/tmp/b29a$ ls
repo
bandit29@bandit:/tmp/b29a$ cd repo
bandit29@bandit:/tmp/b29a/repo$ ls
README.md
bandit29@bandit:/tmp/b29a/repo$ cat README.md
# Bandit Notes
Some notes for bandit30 of bandit.
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

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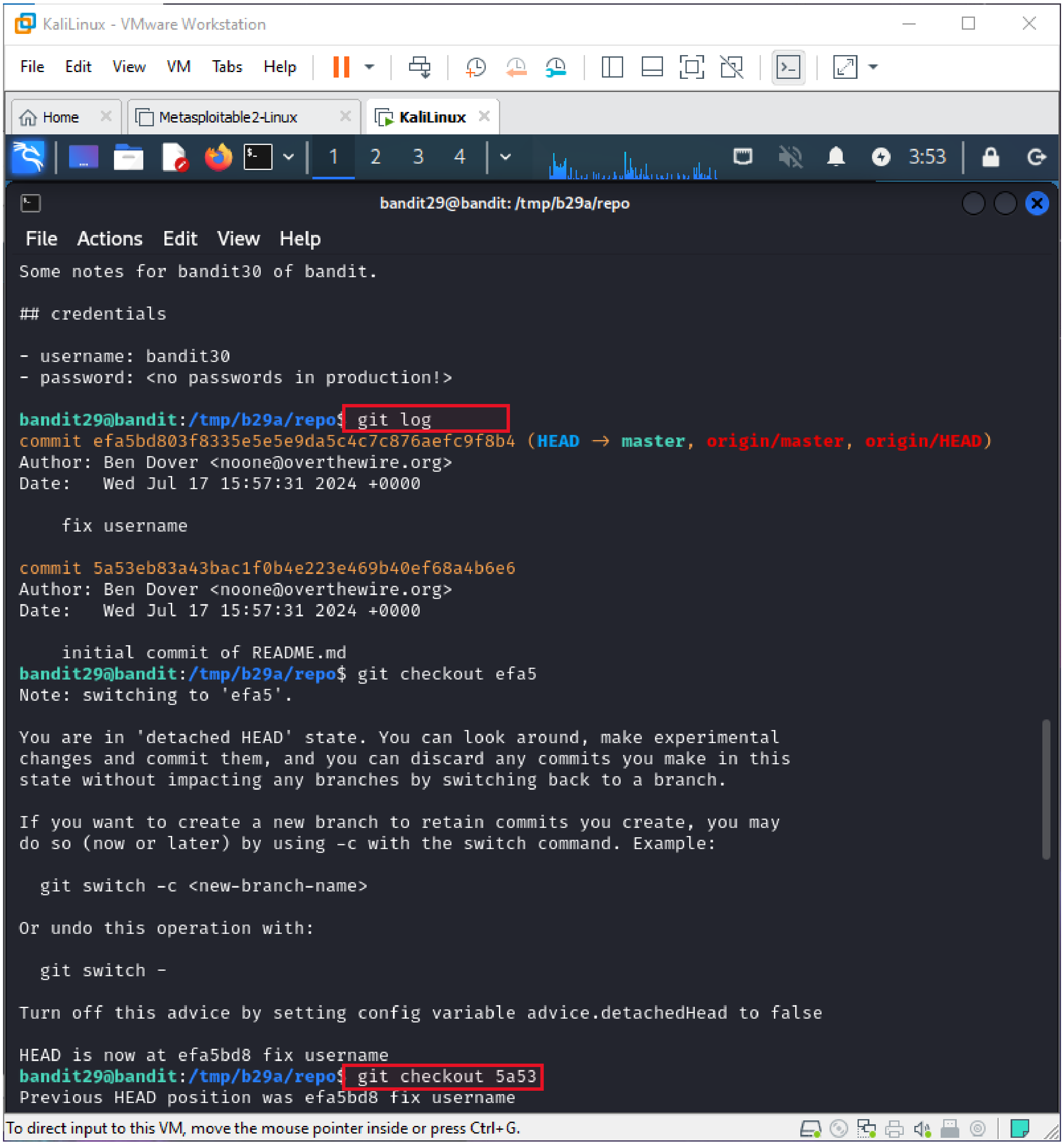
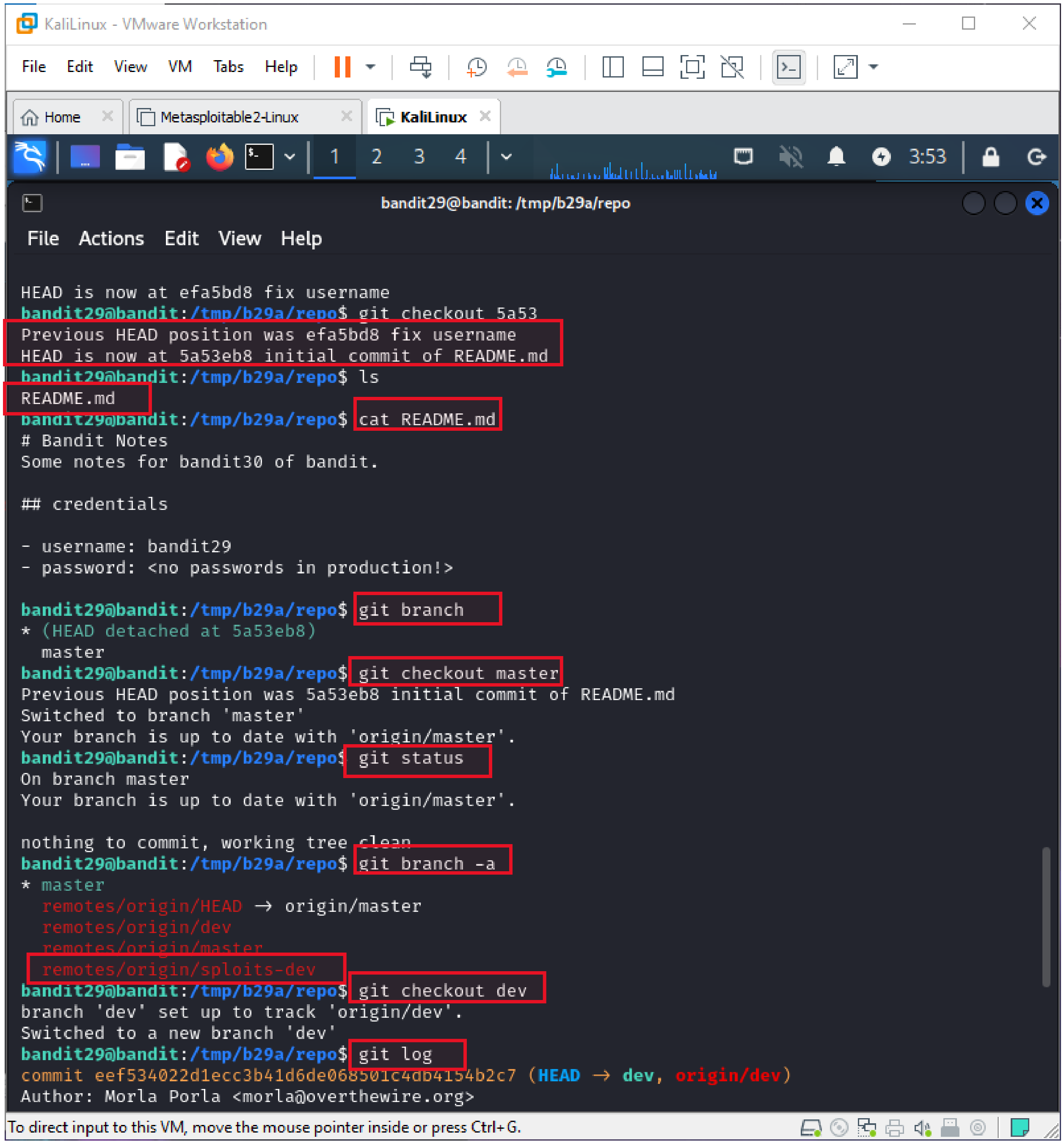

KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
Metasploitable2-Linux
KaliLinux
1 2 3 4
3:53
bandit29@bandit: /tmp/b29a/repo
File Actions Edit View Help
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

```
Some notes for bandit30 of bandit.

## credentials

- username: bandit30
- password: <no passwords in production!>

bandit29@bandit:/tmp/b29a/repo$ git log
commit efa5bd803f8335e5e5e9da5c4c7c876aefc9f8b4 (HEAD → master, origin/master, origin/HEAD)
Author: Ben Dover <noone@overthewire.org>
Date:   Wed Jul 17 15:57:31 2024 +0000

    fix username

commit 5a53eb83a43bac1f0b4e223e469b40ef68a4b6e6
Author: Ben Dover <noone@overthewire.org>
Date:   Wed Jul 17 15:57:31 2024 +0000

    initial commit of README.md
bandit29@bandit:/tmp/b29a/repo$ git checkout efa5
Note: switching to 'efa5'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

  git switch -c <new-branch-name>

Or undo this operation with:

  git switch -

Turn off this advice by setting config variable advice.detachedHead to false

HEAD is now at efa5bd8 fix username
bandit29@bandit:/tmp/b29a/repo$ git checkout 5a53
Previous HEAD position was efa5bd8 fix username
```

23 July, 24



KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
Metasploitable2-Linux
KaliLinux
1 2 3 4
3:53
bandit29@bandit: /tmp/b29a/repo
File Actions Edit View Help

```
HEAD is now at efa5bd8 fix username
bandit29@bandit:/tmp/b29a/repo$ git checkout 5a53
Previous HEAD position was efa5bd8 fix username
HEAD is now at 5a53eb8 initial commit of README.md
bandit29@bandit:/tmp/b29a/repo$ ls
README.md
bandit29@bandit:/tmp/b29a/repo$ cat README.md
# Bandit Notes
Some notes for bandit30 of bandit.

## credentials

- username: bandit29
- password: <no passwords in production!>

bandit29@bandit:/tmp/b29a/repo$ git branch
* (HEAD detached at 5a53eb8)
  master
bandit29@bandit:/tmp/b29a/repo$ git checkout master
Previous HEAD position was 5a53eb8 initial commit of README.md
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
bandit29@bandit:/tmp/b29a/repo$ git status
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean
bandit29@bandit:/tmp/b29a/repo$ git branch -a
* master
  remotes/origin/HEAD → origin/master
  remotes/origin/dev
  remotes/origin/master
  remotes/origin/sploits-dev
bandit29@bandit:/tmp/b29a/repo$ git checkout dev
branch 'dev' set up to track 'origin/dev'.
Switched to a new branch 'dev'
bandit29@bandit:/tmp/b29a/repo$ git log
commit eef534022d1ecc3b41d6de068501c4db4154b2c7 (HEAD → dev, origin/dev)
Author: Morla Porla <morla@overthewire.org>
```

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

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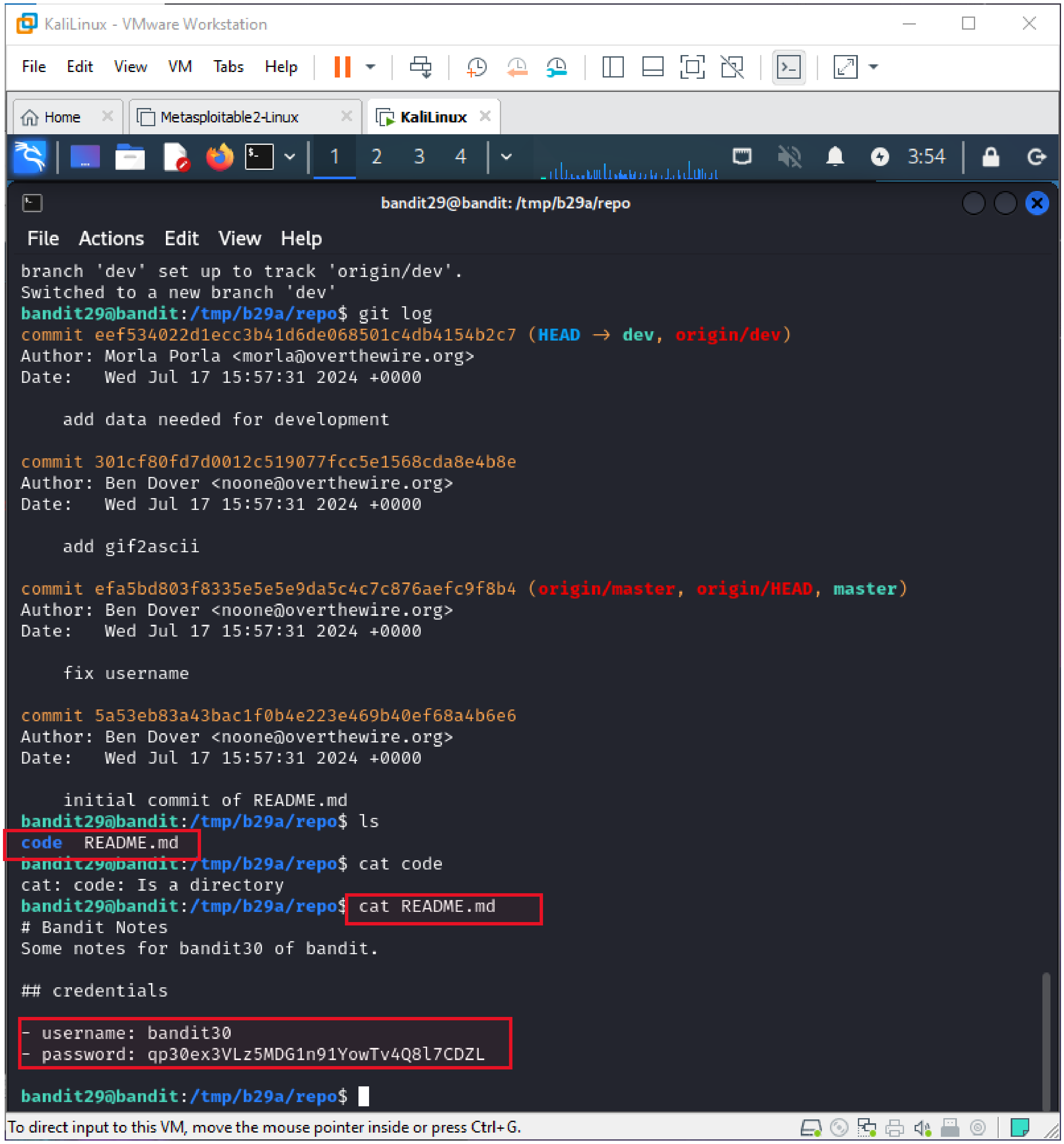
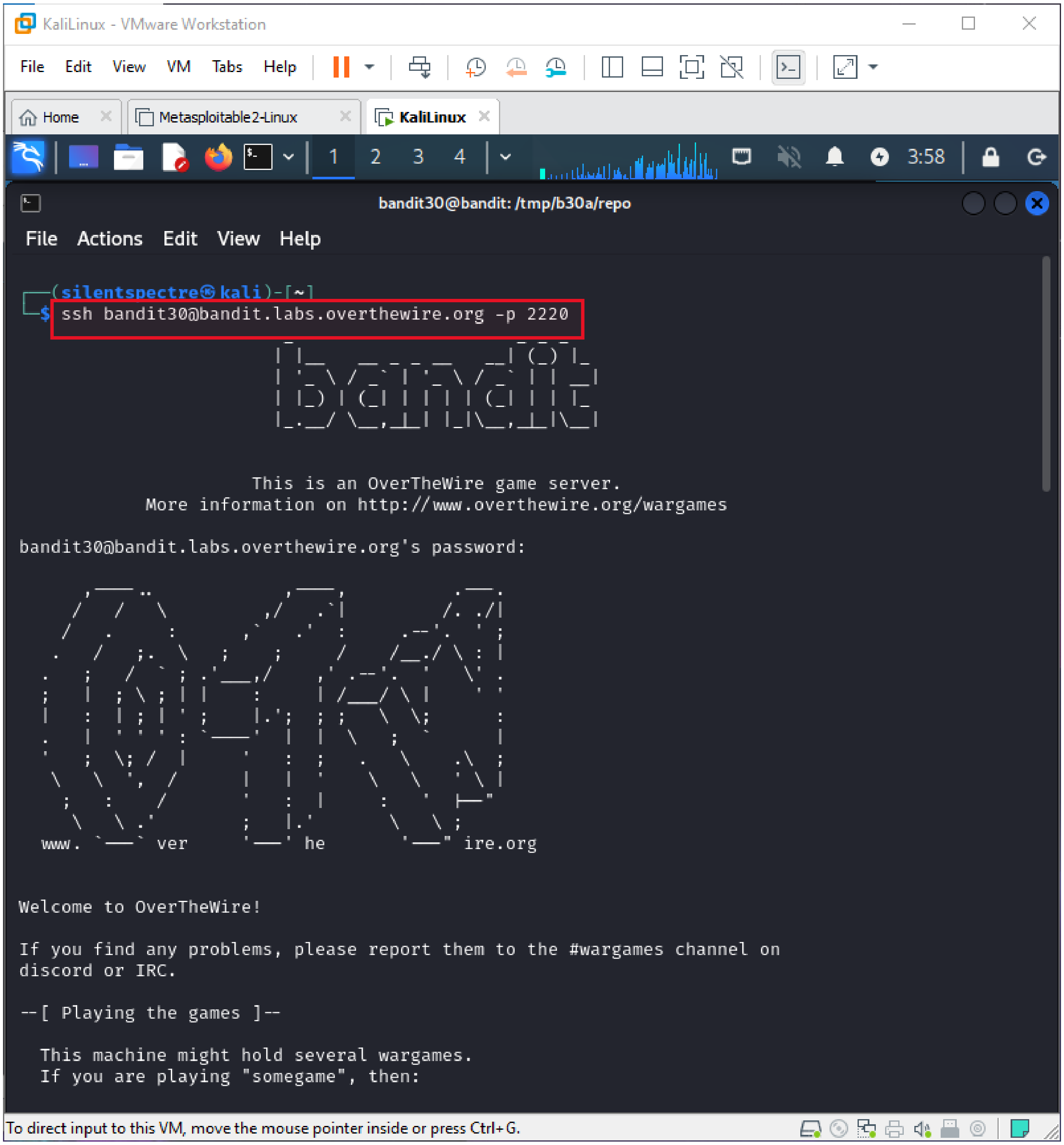


KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
Metasploitable2-Linux
KaliLinux
1 2 3 4
3:54
bandit29@bandit: /tmp/b29a/repo
File Actions Edit View Help

```
branch 'dev' set up to track 'origin/dev'.
Switched to a new branch 'dev'
bandit29@bandit:/tmp/b29a/repo$ git log
commit eef534022d1ecc3b41d6de068501c4db4154b2c7 (HEAD → dev, origin/dev)
Author: Morla Porla <morla@overthewire.org>
Date:   Wed Jul 17 15:57:31 2024 +0000

    add data needed for development

commit 301cf80fd7d0012c519077fcc5e1568cda8e4b8e
Author: Ben Dover <noone@overthewire.org>
Date:   Wed Jul 17 15:57:31 2024 +0000

    add gif2ascii

commit efa5bd803f8335e5e5e9da5c4c7c876aefc9f8b4 (origin/master, origin/HEAD, master)
Author: Ben Dover <noone@overthewire.org>
Date:   Wed Jul 17 15:57:31 2024 +0000

    fix username

commit 5a53eb83a43bac1f0b4e223e469b40ef68a4b6e6
Author: Ben Dover <noone@overthewire.org>
Date:   Wed Jul 17 15:57:31 2024 +0000

    initial commit of README.md
bandit29@bandit:/tmp/b29a/repo$ ls
code  README.md
bandit29@bandit:/tmp/b29a/repo$ cat code
cat: code: Is a directory
bandit29@bandit:/tmp/b29a/repo$ cat README.md
# Bandit Notes
Some notes for bandit30 of bandit.

## credentials

- username: bandit30
- password: qp30ex3VLz5MDG1n91YowTv4Q8l7CDZL

bandit29@bandit:/tmp/b29a/repo$
```

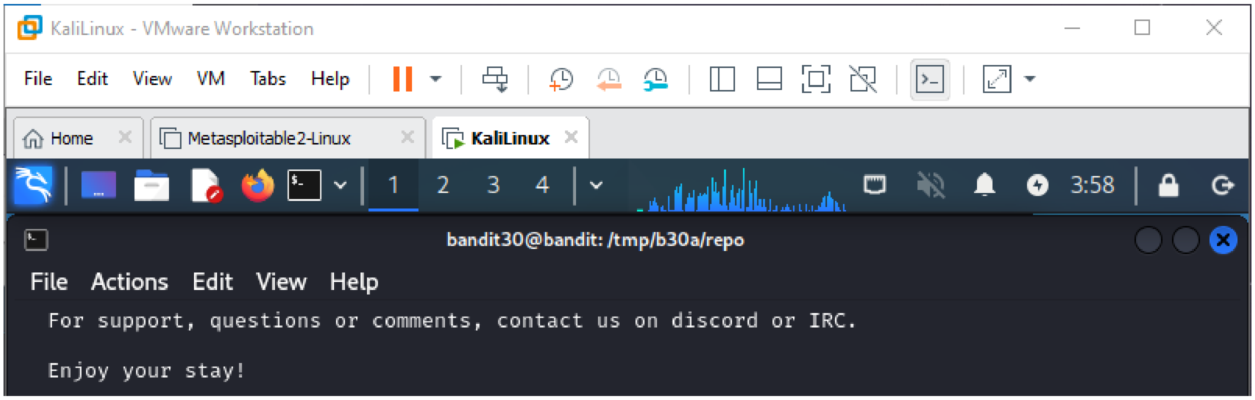
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

23 July, 24


KaliLinux - VMware Workstation
File
Edit
View
VM
Tabs
Help
Home
Metasploitable2-Linux
KaliLinux
1
2
3
4
3:58
bandit30@bandit: /tmp/b30a/repo
File
Actions
Edit
View
Help
To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

```
┌──(silentspectre㉿kali)-[~]
└─$ ssh bandit30@bandit.labs.overthewire.org -p 2220
                         _                     _ _ _
                        | |__   __ _ _ __   __| (_) |_
                        | '_ \ / _` | '_ \ / _` | | __|
                        | |_) | (_| | | | | (_| | | |_
                        |_.__/ \__,_|_| |_|\__,_|_|\__|


                      This is an OverTheWire game server.
            More information on http://www.overthewire.org/wargames

bandit30@bandit.labs.overthewire.org's password:

      ,----..            ,----,          .---.
     /   /   \         ,/   .`|         /. ./|
    /   .     :      ,`   .'  :     .--'.  ' ;
   .   /   ;.  \   ;    ;     /    /__./ \ : |
  .   ;   /  ` ; .'___,/    ,'.--'.  '   \' .
  ;   |  ; \ ; | |    :     |/___/ \ |    ' '
  |   :  | ; | ' ;    |.';  ;;   \  \;      :
  .   |  ' ' ' : `----'  |  | \   ;  `      |
  '   ;  \; /  |     '   :  ;  .   \    .\  ;
   \   \  ',  /      |   |  '   \   \   ' \ |
    ;   :    /       '   :  |    :   '  |--"
     \   \ .'        ;   |.'      \   \ ;
  www. `---` ver     '---' he      '---" ire.org


Welcome to OverTheWire!

If you find any problems, please report them to the #wargames channel on
discord or IRC.

--[ Playing the games ]--

  This machine might hold several wargames.
  If you are playing "somegame", then:
```

23 July, 24


KaliLinux - VMware Workstation
File Edit View VM Tabs Help
Home
Metasploitable2-Linux
KaliLinux
1 2 3 4
3:58
bandit30@bandit: /tmp/b30a/repo
File Actions Edit View Help

```
For support, questions or comments, contact us on discord or IRC.

Enjoy your stay!
```