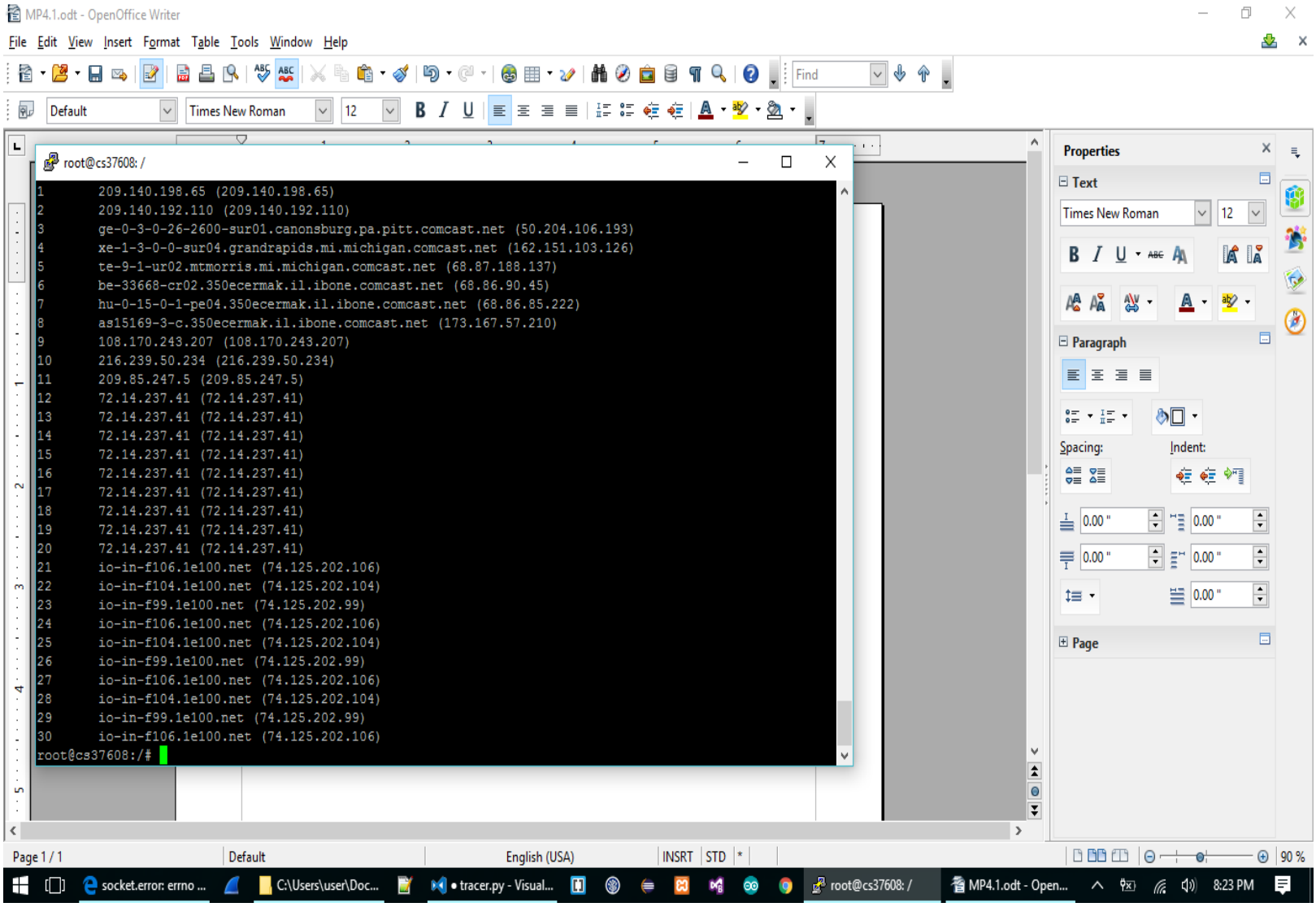
TraceRouting

NOTE

In order to run my script

- turn off shorewall
- be superuser/root
- my file is saved on my server called “tracer” which should be the only file when you type “ls” while at the base directory

In my trace-routing shell script, my destination host was www.google.com. I spent a lot of time researching and trial and error in my code to try to retrieve the information that was not being given to me such as the asterisks when the socket/(router would drop) would timeout or when the name stated that it was “Unknown”. The traceroute program I implemented is hard-coded to google so the user cannot enter “traceroute [-HOSTNAME]” so I hope that is not a problem. I was able to resolve the ip to hostname which was simple instead of it just saying “Unknown” it at least shows an ipAddress or it resolves to a hostname. Sometimes when I would run my program I would get routers that would show the asterisks (meaning) it dropped the connection and went to another route to google. However, sometimes I would not get that and it would successfully show all hops. I did experiment with the ttl and timeouts. The ttl did not give me any success in trying to show me unknown information which when I did my research it was saying to tweak the the time to live. However, I was able to increase the socket timeouts from .5 seconds to 2 seconds and that ended up giving a little more information. Like I said, sometimes it still gives the asterisks but sometimes it doesn't. When I had it set to .5 seconds it would almost guarantee to give me the asterisks/timeout.


MP4.1.odt - OpenOffice Writer
File Edit View Insert Format Table Tools Window Help
Default
Times New Roman
12
root@cs37608: /
1 209.140.198.65 (209.140.198.65)
2 209.140.192.110 (209.140.192.110)
3 ge-0-3-0-26-2600-sur01.canonsburg.pa.pitt.comcast.net (50.204.106.193)
4 xe-1-3-0-0-sur04.grandrapids.mi.michigan.comcast.net (162.151.103.126)
5 te-9-1-ur02.mtmorris.mi.michigan.comcast.net (68.87.188.137)
6 be-33668-cr02.350ecermak.il.ibone.comcast.net (68.86.90.45)
7 hu-0-15-0-1-pe04.350ecermak.il.ibone.comcast.net (68.86.85.222)
8 as15169-3-c.350ecermak.il.ibone.comcast.net (173.167.57.210)
9 108.170.243.207 (108.170.243.207)
10 216.239.50.234 (216.239.50.234)
11 209.85.247.5 (209.85.247.5)
12 72.14.237.41 (72.14.237.41)
13 72.14.237.41 (72.14.237.41)
14 72.14.237.41 (72.14.237.41)
15 72.14.237.41 (72.14.237.41)
16 72.14.237.41 (72.14.237.41)
17 72.14.237.41 (72.14.237.41)
18 72.14.237.41 (72.14.237.41)
19 72.14.237.41 (72.14.237.41)
20 72.14.237.41 (72.14.237.41)
21 io-in-f106.1e100.net (74.125.202.106)
22 io-in-f104.1e100.net (74.125.202.104)
23 io-in-f99.1e100.net (74.125.202.99)
24 io-in-f106.1e100.net (74.125.202.106)
25 io-in-f104.1e100.net (74.125.202.104)
26 io-in-f99.1e100.net (74.125.202.99)
27 io-in-f106.1e100.net (74.125.202.106)
28 io-in-f104.1e100.net (74.125.202.104)
29 io-in-f99.1e100.net (74.125.202.99)
30 io-in-f106.1e100.net (74.125.202.106)
root@cs37608:/#
Properties
Text
Times New Roman
12
Paragraph
Spacing:
Indent:
Page
Page 1 / 1
Default
English (USA)
INSRT
STD
90 %
socket.error: errno ...
C:\Users\user\Doc...
tracer.py - Visual...
root@cs37608: /
MP4.1.odt - Open...
8:23 PM