

# 20MCA136 - Networking & System Administration Lab

## Assignment

Analyze network packet stream using wireshark.

Perform basic network service tests using nc.

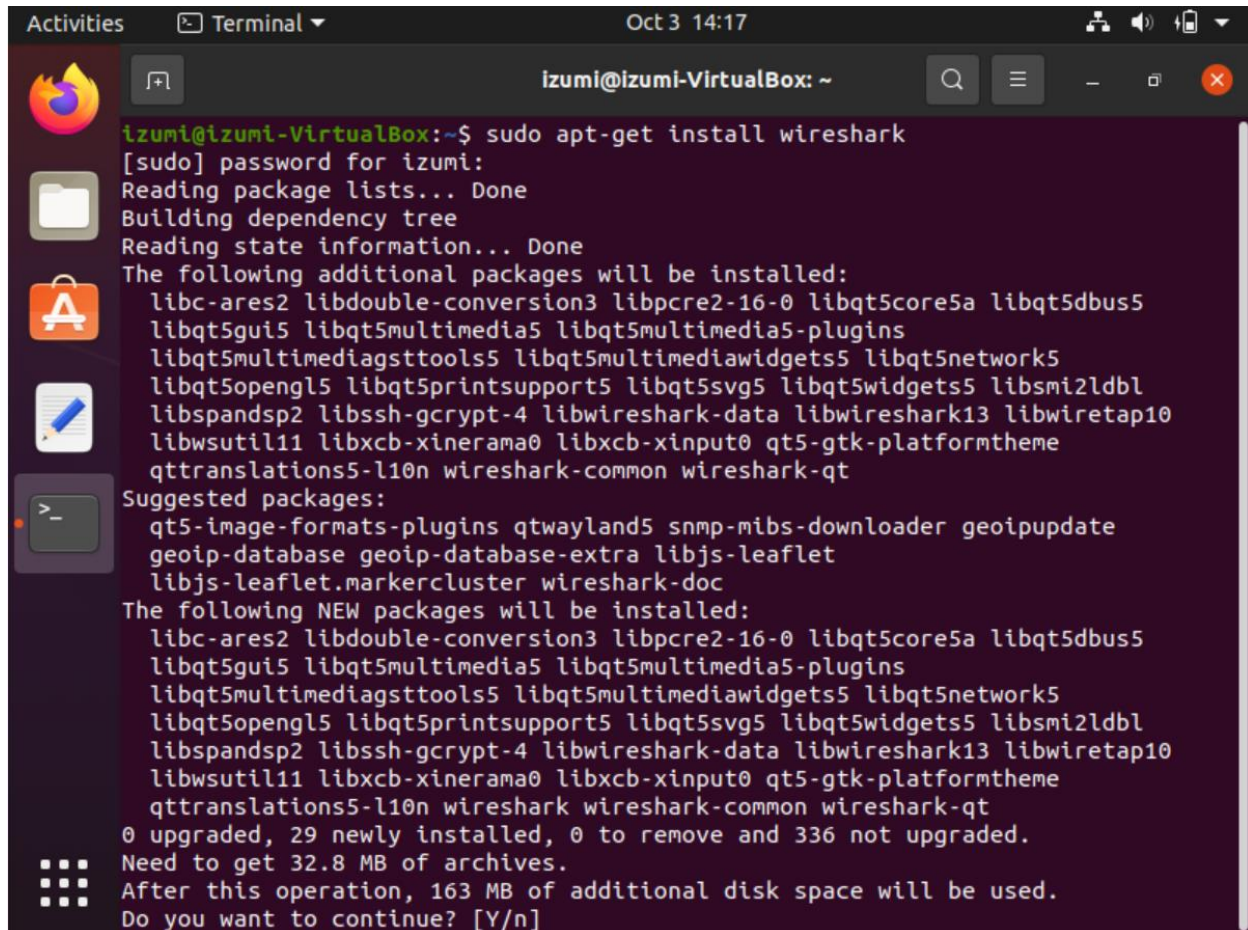
Submitted By:

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RMCA S2-A

Roll no.01

## sudo apt-get install wireshark

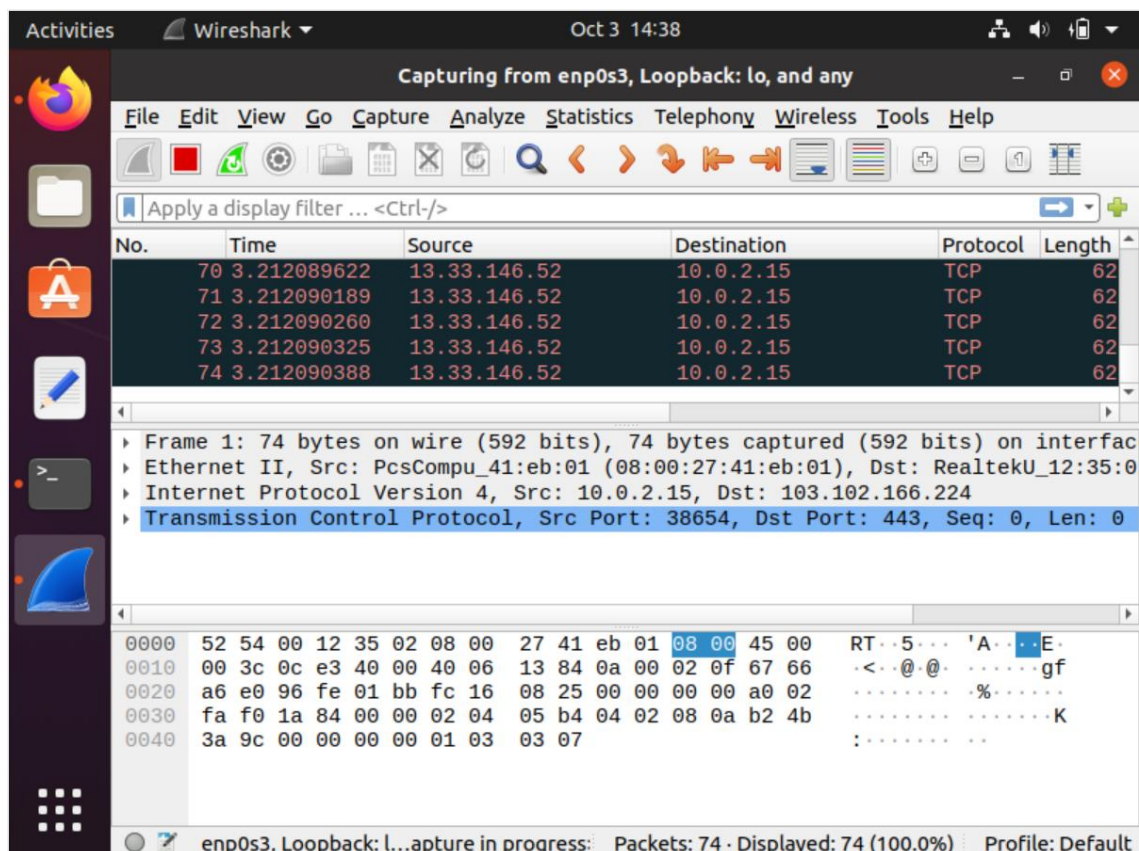
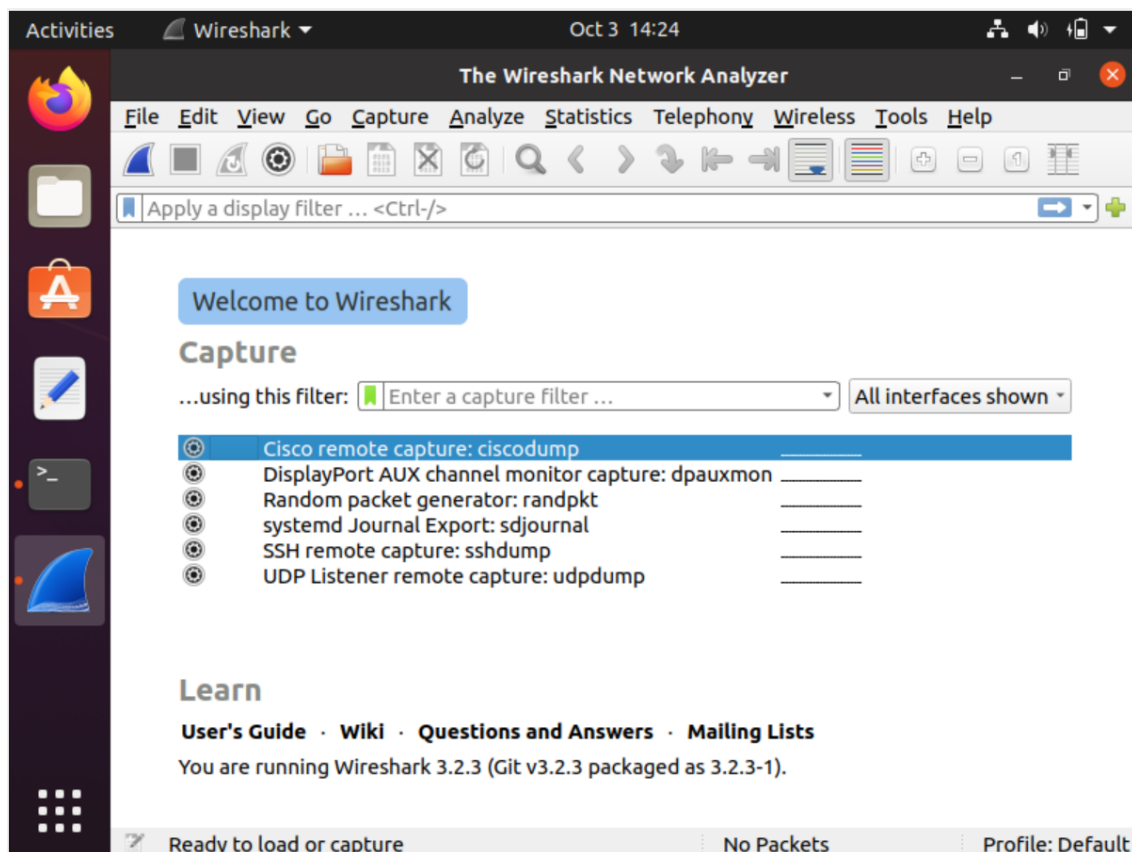


A terminal window titled "Terminal" with a date and time of "Oct 3 14:17". The user is logged in as "izumi" on a machine named "izumi-VirtualBox". The terminal shows the command "sudo apt-get install wireshark" being executed. The output indicates that the password for "izumi" is required, and then it shows the progress of reading package lists, building a dependency tree, and reading state information. It lists additional packages to be installed, including various Qt5 libraries and Wireshark components. It also lists suggested packages like "qt5-image-formats-plugins" and "snmp-mibs-downloader". Finally, it shows the new packages to be installed, the disk space requirements (32.8 MB), and asks for confirmation to continue.

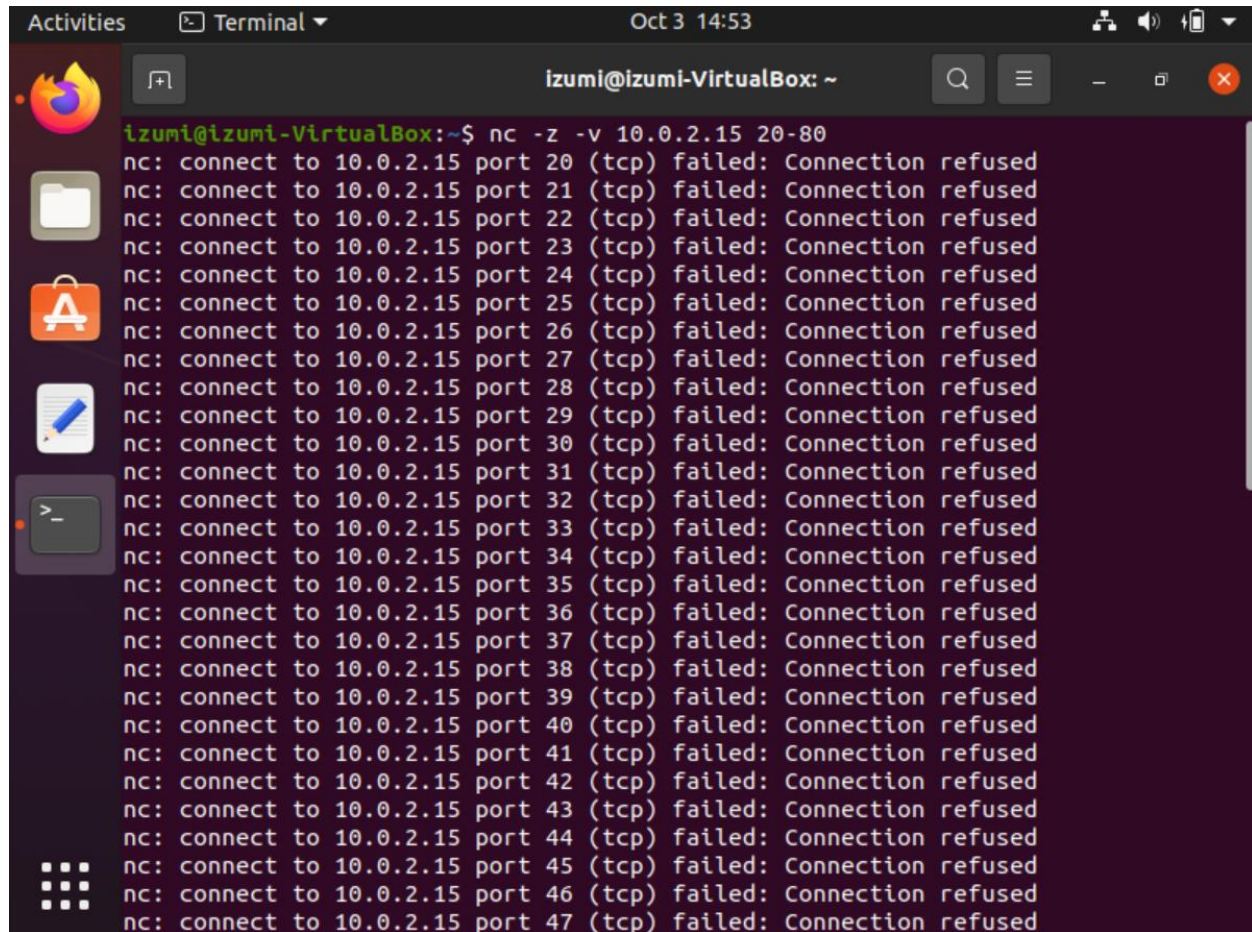
```
izumi@izumi-VirtualBox:~$ sudo apt-get install wireshark
[sudo] password for izumi:
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  libc-ares2 libdouble-conversion3 libpcre2-16-0 libqt5core5a libqt5dbus5
  libqt5gui5 libqt5multimedia5 libqt5multimedia5-plugins
  libqt5multimediagsttools5 libqt5multimediawidgets5 libqt5network5
  libqt5opengl5 libqt5sprintsupport5 libqt5svg5 libqt5widgets5 libsmi2ldbl
  libspandsp2 libssh-gcrypt-4 libwireshark-data libwireshark13 libwiretap10
  libwsutil11 libxcb-xinerama0 libxcb-xinput0 qt5-gtk-platformtheme
  qttranslations5-l10n wireshark-common wireshark-qt
Suggested packages:
  qt5-image-formats-plugins qtwayland5 snmp-mibs-downloader geoipupdate
  geoip-database geoip-database-extra libjs-leaflet
  libjs-leaflet.markercluster wireshark-doc
The following NEW packages will be installed:
  libc-ares2 libdouble-conversion3 libpcre2-16-0 libqt5core5a libqt5dbus5
  libqt5gui5 libqt5multimedia5 libqt5multimedia5-plugins
  libqt5multimediagsttools5 libqt5multimediawidgets5 libqt5network5
  libqt5opengl5 libqt5sprintsupport5 libqt5svg5 libqt5widgets5 libsmi2ldbl
  libspandsp2 libssh-gcrypt-4 libwireshark-data libwireshark13 libwiretap10
  libwsutil11 libxcb-xinerama0 libxcb-xinput0 qt5-gtk-platformtheme
  qttranslations5-l10n wireshark wireshark-common wireshark-qt
0 upgraded, 29 newly installed, 0 to remove and 336 not upgraded.
Need to get 32.8 MB of archives.
After this operation, 163 MB of additional disk space will be used.
Do you want to continue? [Y/n]
```

## Sudo dpkg-reconfigure wireshark-common

```
izumi@izumi-VirtualBox:~$ sudo dpkg-reconfigure wireshark-common
izumi@izumi-VirtualBox:~$
```



# Netcat



The screenshot shows a terminal window titled "izumi@izumi-VirtualBox: ~" with a search bar and window controls. The terminal output shows a netcat scan of 10.0.2.15 ports 20-80. The command used is `nc -z -v 10.0.2.15 20-80`. The output consists of 28 lines, each showing a failed connection attempt to a specific port. The terminal window has a dark background with a sidebar on the left containing icons for Activities, Terminal, and other applications. The top bar shows the date and time as "Oct 3 14:53".

```
izumi@izumi-VirtualBox:~$ nc -z -v 10.0.2.15 20-80
nc: connect to 10.0.2.15 port 20 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 21 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 22 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 23 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 24 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 25 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 26 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 27 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 28 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 29 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 30 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 31 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 32 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 33 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 34 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 35 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 36 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 37 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 38 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 39 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 40 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 41 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 42 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 43 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 44 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 45 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 46 (tcp) failed: Connection refused
nc: connect to 10.0.2.15 port 47 (tcp) failed: Connection refused
```