

Assignments:-4

Module:- NDC(SNORT_Ubuntu)

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Lab Assignment :-

Install and configure SNORT-2.9.20 on following OS:

3. Ubuntu 22.04

Step-1:- sudo apt install -y gcc libpcre3-dev zlib1g-dev libluajit-5.1-dev libpcap-dev openssl libssl-dev libnghhttp2-dev libdumbnet-dev bison flex libdnet autoconf libtool

```
Processing triggers for man-db (2.10.2-1) ...
root@Ubuntu:~# sudo apt install -y gcc libpcre3-dev zlib1g-dev libluajit-5.1-dev
ap-dev openssl libssl1-dev libnghhttp2-dev libdumbnet-dev
bison flex libdnet autoconf libtoollibpcap-dev openssl libssl1-dev libnghhttp2-dev libdumbnet-dev
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

Step-2:-

```
root@Ubuntu:~#
root@Ubuntu:~# apt-get install snort
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
snort is already the newest version (2.9.15.1-6build1).
The following package was automatically installed and is no longer required:
  systemd-hwe-hwdb
Use 'apt autoremove' to remove it.
0 upgraded, 0 newly installed, 0 to remove and 145 not upgraded.
root@Ubuntu:~#
```

Step-2:-Start by making a temporary download folder to your home directory and then changing into it with the command below.

mkdir ~/snort_src && cd ~/snort_src

```
root@Ubunut:~# mkdir ~/snort_src && cd ~/snort_src  
root@Ubunut:~/snort_src#  
root@Ubunut:~/snort_src#
```

Step-3:- Start by downloading the snort version you want to install from the snort release page using wget and ensure you are in the .. directory where you want to install snort.

```
root@Ubunut:~/snort_src# apt install git  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following package was automatically installed and is no longer required:  
  systemd-hwe-hwdb
```

```
root@Ubunut:~/snort_src# git clone https://github.com/snort3/libdaq.git  
Cloning into 'libdaq'...  
remote: Enumerating objects: 2358, done.  
remote: Counting objects: 100% (93/93), done.  
remote: Compressing objects: 100% (15/15), done.  
remote: Total 2358 (delta 82), reused 80 (delta 78), pack-reused 2265  
Receiving objects: 100% (2358/2358), 1.04 MiB | 3.05 MiB/s, done.  
Resolving deltas: 100% (1715/1715), done.
```

Step-4:- download the gperftools from git hub

```
root@Ubunut:~/snort_src#  
root@Ubunut:~/snort_src# ls  
snap  snort_src  
root@Ubunut:~/snort_src# wget https://github.com/gperftools/gperftools/releases/download/gperftools-2.9.1/gperftools-2.9.1.tar.gz
```

Step-5:-updating the shared libraries using the command underneath.

```
# cd ldconfig
```

```
root@Ubunut:~/snort_src# cd libdaq  
root@Ubunut:~/snort_src/libdaq#
```

Step-6:- #./bootstrap

```
root@Ubunut:~/snort_src# cd libdaq  
root@Ubunut:~/snort_src/libdaq# ./bootstrap  
+ autoreconf -ivf --warnings=all  
autoreconf: export WARNINGS=all  
autoreconf: Entering directory '.'  
autoreconf: configure.ac: not using Gettext  
autoreconf: running: aclocal --force -I m4  
autoreconf: configure.ac: tracing
```

Step-7:- # ./configure

```
autoreconf: Leaving directory '.'  
root@Ubunut:~/snort_src/libdaq# ./configure
```

Step-8:- # make

```
root@Ubunut:~/snort_src/libdaq# make
```

Step-9:- # make install

```
make[1]: Leaving directory /root/snort_src/libdaq  
root@Ubunut:~/snort_src/libdaq# sudo make install
```

Step-10:- # tar xzf gpertools-2.9.1.tar.gz

```
# cd gpertools-2.9.1.tar.gz
```

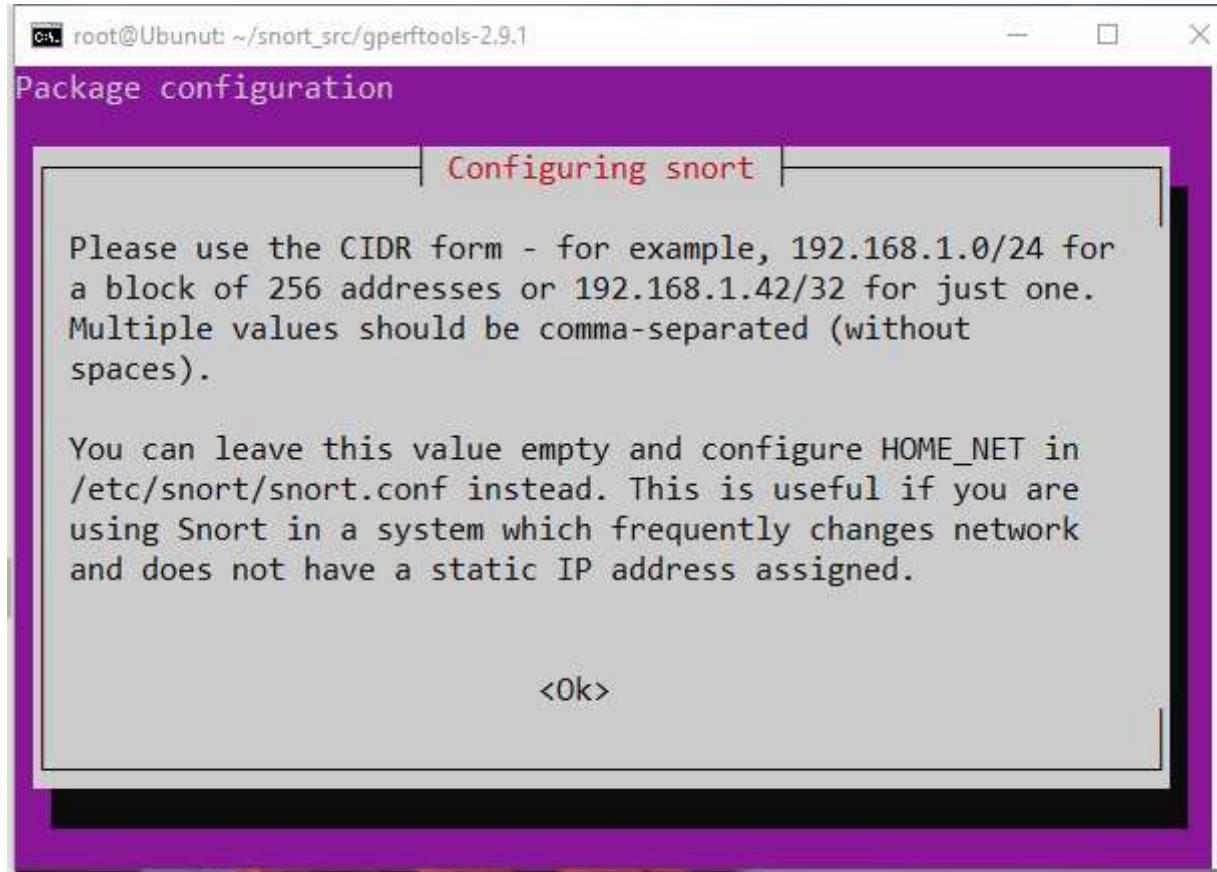
```
# ./configure
```

```
root@Ubunut:~/snort_src# tar xzf gpertools-2.9.1.tar.gz  
root@Ubunut:~/snort_src# cd gpertools-2.9.1/  
root@Ubunut:~/snort_src/gpertools-2.9.1# ./configure
```

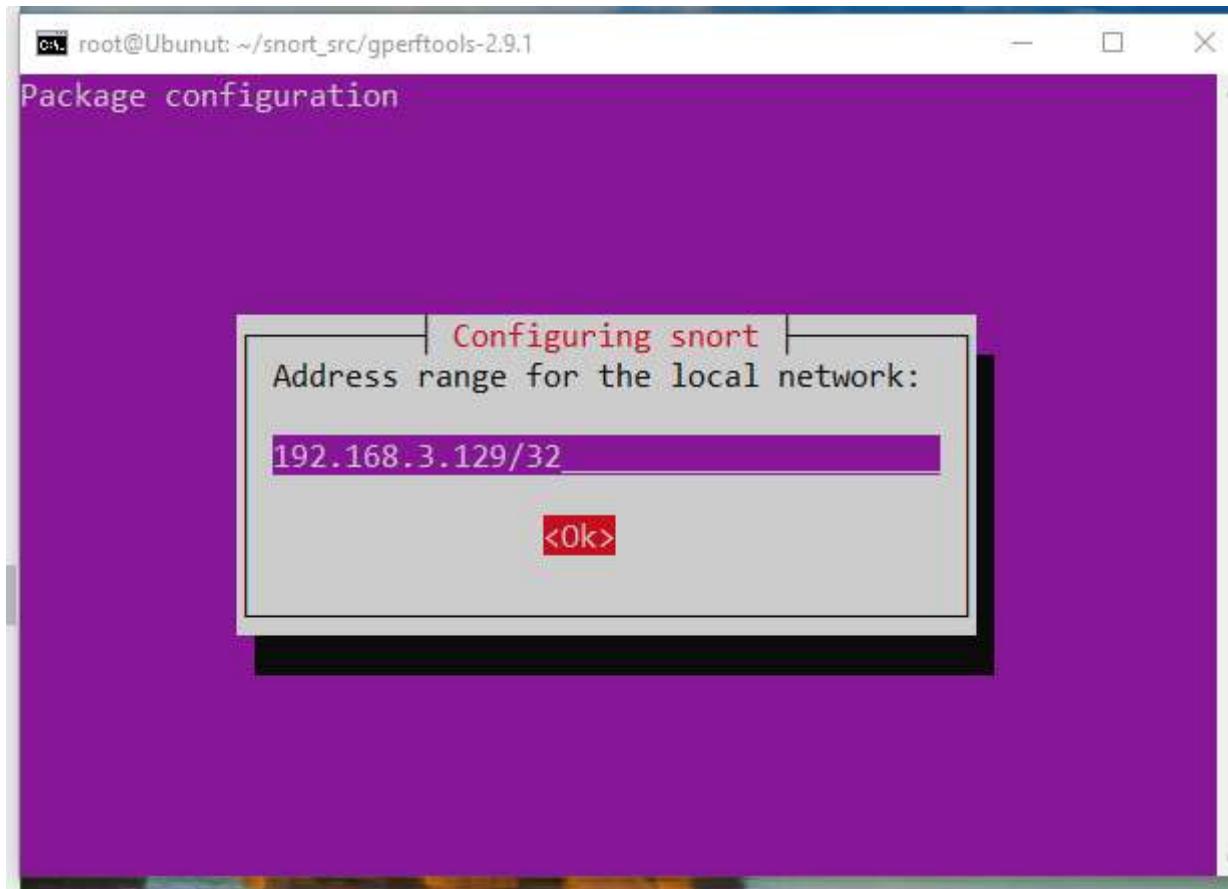
Step-11:- # make && sudo make install

```
root@Ubunut:~/snort_src/gperftools-2.9.1# make && sudo make instal  
l
```

Step-12:- Configure Snort



Step-13:- Give System IP



Step-14:- Go to local rules and set rules

The screenshot shows a terminal window titled "root@Ubunut: /etc/snort/rules". The title bar also displays "GNU nano 6.2". The main content is a text editor showing the "local.rules" file. The file contains the following content:

```
GNU nano 6.2                               local.rules
# $Id: local.rules,v 1.11 2004/07/23 20:15:44 bmc Exp $
#
# LOCAL RULES
#
# This file intentionally does not come with signatures. Put your local
# additions here.
alert icmp any any -> $HOME_NET any (msg:"ICMP test"; sid:10000001)
```

At the bottom of the screen, there is a menu bar with the following options: ^G Help, ^O Write Out, ^W Where Is, ^K Cut, ^T Execute, ^C Location, ^X Exit, ^R Read File, ^V Replace, ^U Paste, ^J Justify, ^/ Go To Line.

Step-15:- Check snort Version

```
root@Ubunut:~/snort_src/gperftools-2.9.1# snort --version

      ,,-      -*> Snort! <*-
o" )~  Version 2.9.15.1 GRE (Build 15125)
     '     By Martin Roesch & The Snort Team: http://www.snort.org
/contact#team
          Copyright (C) 2014-2019 Cisco and/or its affiliates. All
rights reserved.
          Copyright (C) 1998-2013 Sourcefire, Inc., et al.
          Using libpcap version 1.10.1 (with TPACKET_V3)
          Using PCRE version: 8.39 2016-06-14
          Using ZLIB version: 1.2.11

root@Ubunut:~/snort_src/gperftools-2.9.1#
```

```
root@Ubunut:/etc/snort/rules
root@Ubunut:/etc/snort/rules# root@Ubunut:/etc/snort/rules# snort
-v
Running in packet dump mode

      === Initializing Snort ===
Initializing Output Plugins!
pcap DAQ configured to passive.
Acquiring network traffic from "enp0s3".
Decoding Ethernet

      === Initialization Complete ===

      ,,-      -*> Snort! <*-
o" )~  Version 2.9.15.1 GRE (Build 15125)
     '     By Martin Roesch & The Snort Team: http://www.snort.org
/contact#team
          Copyright (C) 2014-2019 Cisco and/or its affiliates. All
rights reserved.
          Copyright (C) 1998-2013 Sourcefire, Inc., et al.
          Using libpcap version 1.10.1 (with TPACKET_V3)
```

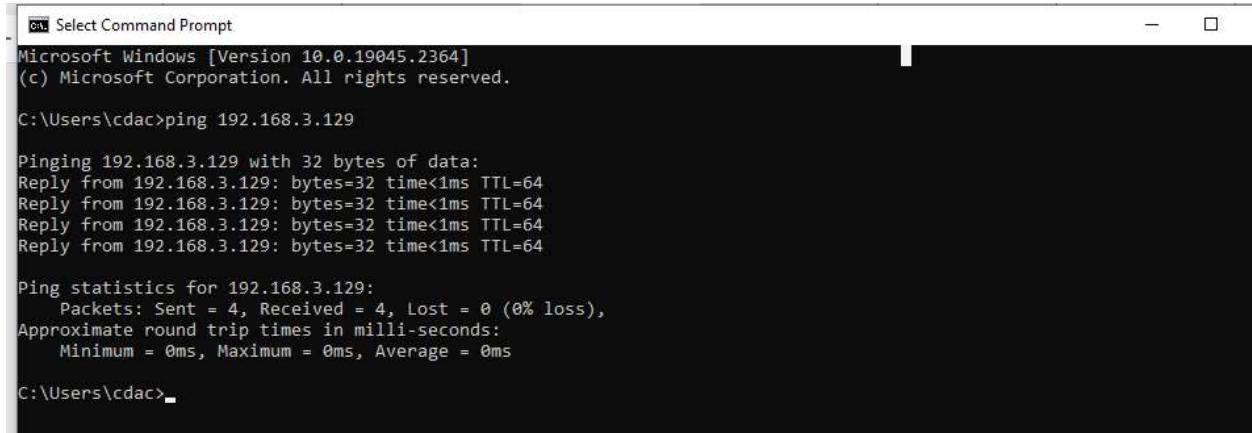
Step-16:- Check ip port status

```
root@Ubunut:~# ip link set dev enp0s3 promisc on
root@Ubunut:~#
```

Step-17:- Run Console rule

```
=====  
Snort exiting  
root@Ubunut:/etc/snort/rules# snort -A console -i enp0s3 -c /etc/snort/snort.conf
```

Step-18:- Go to Windows and ping the system



```
Microsoft Windows [Version 10.0.19045.2364]
(c) Microsoft Corporation. All rights reserved.

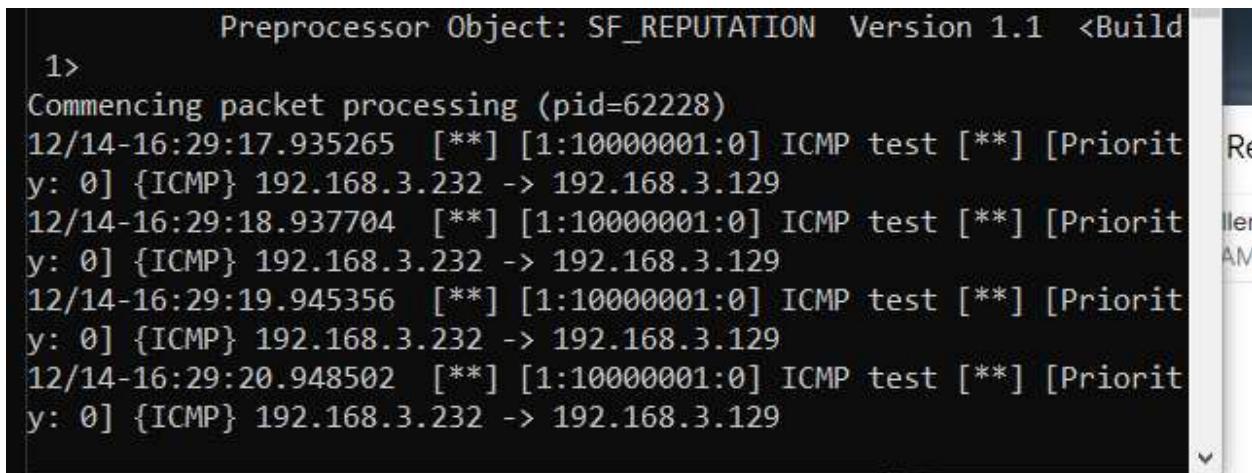
C:\Users\cdac>ping 192.168.3.129

Pinging 192.168.3.129 with 32 bytes of data:
Reply from 192.168.3.129: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.3.129:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\cdac>
```

Step-19:- Check the out Put



```
Preprocessor Object: SF_REPUTATION Version 1.1 <Build 1>
Commencing packet processing (pid=62228)
12/14-16:29:17.935265  [**] [1:10000001:0] ICMP test [**] [Priority: 0] {ICMP} 192.168.3.232 -> 192.168.3.129
12/14-16:29:18.937704  [**] [1:10000001:0] ICMP test [**] [Priority: 0] {ICMP} 192.168.3.232 -> 192.168.3.129
12/14-16:29:19.945356  [**] [1:10000001:0] ICMP test [**] [Priority: 0] {ICMP} 192.168.3.232 -> 192.168.3.129
12/14-16:29:20.948502  [**] [1:10000001:0] ICMP test [**] [Priority: 0] {ICMP} 192.168.3.232 -> 192.168.3.129
```