Ex. No.: Date:

SNORT IDS

Aim:

To demonstrate Intrusion Detection System (IDS) using snort tool.

Algorithm:

- 1. Download and extract the latest version of dag and snort
- 2. Install development packages libpcap and pcre.
- 3. Install daq and then followed by snort.
- 4. Verify the installation is correct.
- 5. Create the configuration file, rule file and log file directory
- 6. Create snort.conf and icmp.rules files
- 7. Execute snort from the command line
- 8. Ping to yahoo website from another terminal
- 9. Watch the alert messages in the log files

Output:

[root@localhost security lab]# cd /usr/src

[root@localhost security lab]# wget https://www.snort.org/downloads/snort/daq-2.0.7.tar.gz

[root@localhost security lab]# wget https://www.snort.org/downloads/snort/snort-

2.9.16.1.tar.gz

[root@localhost security lab]# tar xvzf daq-2.0.7.tar.gz [root@localhost security lab]# tar xvzf snort-2.9.16.1.tar.gz [root@localhost security lab]# yum install libpcap* pcre* libdnet* -y [root@localhost security lab]# cd daq-2.0.7 [root@localhost security lab]# ./configure

[root@localhost security lab]# make [root@localhost security lab]# make install

[root@localhost security lab]# cd snort-

2.9.16.1 [root@localhost security lab]#.

/configure [root@localhost security lab]# make

[root@localhost security lab]# make install

[root@localhost security lab]# snort --version

,,_ -*> Snort! <*-

o")~ Version 2.9.8.2 GRE (Build 335)

"" By Martin Roesch & The Snort Team: http://www.snort.org/contact#team

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Using libpcap version 1.7.3

Using PCRE version: 8.38 2015-11-23

Using ZLIB version: 1.2.8

[root@localhost security lab]# mkdir /etc/snort

[root@localhost security lab]# mkdir /etc/snort/rules

```
[root@localhost security lab]# mkdir /var/log/snort
[root@localhost security lab]# vi /etc/snort/snort.conf
add this line-
include /etc/snort/rules/icmp.rules
```

[root@localhost security lab]# vi /etc/snort/rules/icmp.rules
alert icmp any any -> any any (msg:"ICMP Packet"; sid:477; rev:3;)

[root@localhost security lab]# snort -i enp3s0 -c /etc/snort/snort.conf -l /var/log/snort/

Another terminal

[root@localhost security lab]# ping www.yahoo.com

Ctrl + C

[root@localhost security lab]# vi /var/log/snort/alert

[**] [1:477:3] ICMP Packet [**]

[Priority: 0]

 $10/06\text{-}15\text{:}03\text{:}11.187877 \ 192.168.43.148 \to 106.10.138.240 \\ \text{ICMP TTL:}64 \ \text{TOS:}0\text{x0} \ \text{ID:}45855 \ \text{IpLen:}20 \ \text{DgmLen:}84 \ \text{DF}$

Type:8 Code:0 ID:14680 Seq:64 ECHO

[**] [1:477:3] ICMP Packet [**]

[Priority: 0]

10/06-15:03:11.341739 106.10.138.240 -> 192.168.43.148 ICMP TTL:52 TOS:0x38 ID:2493 IpLen:20 DgmLen:84 Type:0 Code:0 ID:14680 Seq:64 ECHO REPLY

[**] [1:477:3] ICMP Packet [**]

[Priority: 0]

10/06-15:03:12.189727 192.168.43.148 -> 106.10.138.240 ICMP TTL:64 TOS:0x0 ID:46238 IpLen:20 DgmLen:84 DF Type:8 Code:0 ID:14680 Seq:65 ECHO

[**] [1:477:3] ICMP Packet [**]

[Priority: 0]

10/06-15:03:12.340881 106.10.138.240 -> 192.168.43.148 ICMP TTL:52 TOS:0x38 ID:7545 IpLen:20 DgmLen:84 Type:0 Code:0 ID:14680 Seq:65 ECHO REPLY

Result: