

## Praktikum Jaringan Komputer

### II. Linux Networking Tools

#### Ping

Ping adalah salah satu tools yang digunakan untuk mengecek apakah jaringan tersebut jalan dengan lancar.

```
highway:~# ping www.eepis-its.edu
PING www.eepis-its.edu (202.154.62.229) 56(84) bytes of data.
64 bytes from lecturer.eepis-its.edu (202.154.62.229): icmp_seq=1 ttl=62 time=0.541 ms
64 bytes from surat.eepis-its.edu (202.154.62.229): icmp_seq=2 ttl=62 time=0.509 ms
64 bytes from lecturer.eepis-its.edu (202.154.62.229): icmp_seq=3 ttl=62 time=0.521 ms
64 bytes from surat.eepis-its.edu (202.154.62.229): icmp_seq=4 ttl=62 time=0.494 ms

--- www.eepis-its.edu ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3004ms
rtt min/avg/max/mdev = 0.494/0.516/0.541/0.023 ms
```

#### Traceroute

Traceroute adalah salah satu tools yang digunakan untuk melacak jalur data yang kita kirimkan melalui jalur mana saja.

```
dhoto@pluto:~$ traceroute www.kernel.org
traceroute: Warning: www.kernel.org has multiple addresses; using 204.152.191.5
traceroute to zeus-pub.kernel.org (204.152.191.5), 30 hops max, 38 byte packets
 1 cisco (202.154.62.225) 0.602 ms 0.576 ms 0.588 ms
 2 firewall (202.154.13.2) 0.401 ms 1.127 ms 0.350 ms
 3 10.10.10.1 (10.10.10.1) 2.950 ms 4.038 ms 2.494 ms
 4 192.168.90.1 (192.168.90.1) 391.446 ms 448.708 ms 382.934 ms
 5 gtw-1.sby.rad.net.id (202.154.57.1) 200.580 ms 265.604 ms 301.119 ms
 6 202.161.128.9 (202.161.128.9) 968.898 ms 837.912 ms 1274.634 ms
 7 202.161.130.1 (202.161.130.1) 862.813 ms 995.306 ms 687.883 ms
 8 202.161.130.41 (202.161.130.41) 875.528 ms 1062.146 ms 1091.127 ms
 9 ge-0-1-0.405.ar1.SJC2.gblx.net (207.138.144.185) 1036.578 ms 1005.369 ms
976.539 ms
10 so5-0-0-2488M.ar2.PAO2.gblx.net (67.17.93.109) 826.379 ms 835.139 ms
1047.504 ms
11 208.50.13.60 (208.50.13.60) 969.050 ms 735.937 ms 1033.721 ms
12 r7-2.r8.pao1.isc.org (192.5.4.225) 971.793 ms 997.049 ms 782.417 ms
13 r8-pao1.r3.sfo2.isc.org (192.5.4.233) 939.411 ms 955.542 ms 962.236 ms
```

14 zeus-pub1.kernel.org (204.152.191.5) 1078.658 ms 1038.381 ms 1060.929 ms

## mtr

My Traceroute adalah gabungan program ping dan traceroute, perintah untuk melakukan mtr adalah :

# mtr [www.rad.net.id](http://www.rad.net.id)

```
My traceroute [v0.67]
pluto (0.0.0.0)(tos=0x0 psize=64 bitpattern=0x00) Tue Sep 27 00:41:54 2005
Keys: Help Display mode Restart statistics Order of fields quit

Host                                     Packets      Pings
Loss%  Snt  Last Avg Best Wrst StDev
1. cisco.eepis-its.edu                   0.0%    4  0.6 0.6 0.6 0.6 0.0
2. firewall.eepis-its.edu                 0.0%    4  0.4 0.4 0.4 0.4 0.0
3. 10.10.10.1                             0.0%    4  3.0 5.6 3.0 11.0 3.7
4. 192.168.90.1                           0.0%    4 518.8 403.5 261.3 518.8 106.4
5. gtw-1.sby.rad.net.id                   0.0%    4 398.8 395.4 353.0 444.5 37.9
6. gw2-jkt-sby.rad.net.id                 0.0%    4 422.5 368.8 270.4 422.5 85.3
7. noc4-dr2.rad.net.id                    33.3%    4 293.4 357.6 293.4 421.8 90.8
8. 202.154.1.11                           0.0%    4 448.6 380.2 320.6 448.6 64.4
```

## Tethereal

Tethereal adalah aplikasi data capture yang dapat memberikan informasi tentang jaringan yang sedang jalan, perintahnya :

pluto:~# **tethereal**

\*\* (process:1990): WARNING \*\*: Protocol filter name "ISystemActivator" has one or more invalid characters.

\*\* (process:1990): WARNING \*\*: Protocol filter name "MAP\_DialoguePDU" has one or more invalid characters.

\*\* (process:1990): WARNING \*\*: Protocol filter name "CCSDS" has one or more invalid characters.

\*\* (process:1990): WARNING \*\*: Protocol filter name "FC-dNS" has one or more invalid characters.

\*\* (process:1990): WARNING \*\*: Protocol filter name "FZS" has one or more invalid characters.

Capturing on eth0

0.023212 10.252.102.143 -> 202.154.62.237 TCP 42683 > ssh [ACK] Seq=0 Ack=64 Win=32440 Len=0  
TSV=317296430 TSER=1227343525

0.023365 64.111.197.58 -> 202.154.62.237 HTTP Continuation or non-HTTP traffic

0.023985 202.154.62.237 -> 64.111.197.58 TCP 58656 > www [ACK] Seq=0 Ack=1448 Win=32767 Len=0  
TSV=1227343531 TSER=2762794060

0.024034 202.154.62.237 -> 10.252.2.112 HTTP Continuation or non-HTTP traffic

0.024921 Cisco\_43:a8:85 -> Spanning-tree-(for-bridges)\_00 STP Conf. Root = 32922/00:09:e8:8e:0f:80 Cost =  
3019 Port = 0x8005

0.024047 202.154.62.228 -> 202.154.62.237 TCP 60213 > 47238 [ACK] Seq=0 Ack=0 Win=5792 Len=0  
TSV=4096565817 TSER=1227343367

0.024098 202.154.62.237 -> 202.154.62.228 TCP [TCP ZeroWindow] [TCP ACKed lost segment] 47238 > 60213  
[ACK] Seq=0 Ack=1 Win=0 Len=0 TSV=1227343570 TSER=4096565613

0.035373 152.118.24.30 -> 202.154.62.237 RSYNC Client Initialisation (Version    )

0.035427 202.154.62.237 -> 152.118.24.30 TCP 47764 > rsync [ACK] Seq=0 Ack=4294965848 Win=32767 Len=0  
TSV=1227343581 TSER=746545980 SLE=0 SRE=1448

0.084443 152.118.24.30 -> 202.154.62.237 RSYNC [TCP Retransmission] Server Initialisation (Version O   )

0.084510 202.154.62.237 -> 152.118.24.30 TCP 47764 > rsync [ACK] Seq=0 Ack=1448 Win=32767 Len=0  
TSV=1227343631 TSER=746546282

```
3/4H).135176 152.118.24.30 -> 202.154.62.237 RSYNC Client Initialisation (Version
  0.135213 202.154.62.237 -> 152.118.24.30 TCP 47766 > rsync [ACK] Seq=0 Ack=1448 Win=32767 Len=0
TSV=1227343681 TSER=746546342
  0.172384 10.252.2.112 -> 202.154.62.237 TCP 1505 > 3128 [ACK] Seq=0 Ack=1448 Win=62792 Len=0
  0.184576 64.111.197.62 -> 202.154.62.237 HTTP Continuation or non-HTTP traffic
  0.184608 202.154.62.237 -> 64.111.197.62 TCP 58660 > www [ACK] Seq=0 Ack=4294964400 Win=32767 Len=0
TSV=1227343731 TSER=1697478423
```

## **nslookup**

nslookup adalah aplikasi yang digunakan untuk memberikan informasi IP address dan Nama domain, contoh

```
pluto:~# nslookup www.yahoo.com
```

```
Server:      202.154.62.227
Address:     202.154.62.227#53
```

*Non-authoritative answer:*

*www.yahoo.com canonical name = www.yahoo.akadns.net.*

*Name: www.yahoo.akadns.net*

*Address: 68.142.197.76*

*Name: www.yahoo.akadns.net*

*Address: 68.142.197.77*

*Name: www.yahoo.akadns.net*

*Address: 68.142.197.81*

*Name: www.yahoo.akadns.net*

*Address: 68.142.197.83*

*Name: www.yahoo.akadns.net*

*Address: 68.142.197.85*

*Name: www.yahoo.akadns.net*

*Address: 68.142.197.70*

*Name: www.yahoo.akadns.net*

*Address: 68.142.197.73*

*Name: www.yahoo.akadns.net*

*Address: 68.142.197.74*

```
pluto:~# nslookup 202.154.62.230
```

```
Server:      202.154.62.227
Address:     202.154.62.227#53
```

*230.62.154.202.in-addr.arpa name = mirror.eepis-its.edu.*

## **host**

Perintah host digunakan untuk mengetahui keanggotaan dari suatu domain, misalkan kita ingin mengetahui anggota dari domain eepis-its.edu, jalankan perintah :

## pluto:~# host -vl eepis-its.edu

Trying "eepis-its.edu"

:: ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 53421

:: flags: qr aa ra; QUERY: 1, ANSWER: 396, AUTHORITY: 0, ADDITIONAL: 0

:: QUESTION SECTION:

;

:: ANSWER SECTION:

eepis-its.edu. 86400 IN NS ns1.eepis-its.edu.  
eepis-its.edu. 86400 IN NS ns2.eepis-its.edu.  
eepis-its.edu. 86400 IN NS ns3.eepis-its.edu.  
absensi.eepis-its.edu. 43200 IN A 10.252.12.236  
acer-js0fgsvsyc.eepis-its.edu. 43200 IN A 10.252.11.116  
acer-k46tlvedgt.eepis-its.edu. 43200 IN A 10.252.102.86  
adeep.eepis-its.edu. 43200 IN A 10.252.10.247  
Administrator.eepis-its.edu. 43200 IN A 10.252.109.243  
AGUSWIDODO.eepis-its.edu. 43200 IN A 10.252.10.250  
aladin.eepis-its.edu. 43200 IN A 10.252.10.249  
andri.eepis-its.edu. 43200 IN A 10.252.108.174  
anie.eepis-its.edu. 43200 IN A 10.252.108.226  
aries.eepis-its.edu. 43200 IN A 10.252.102.70  
arifin.eepis-its.edu. 43200 IN A 10.252.12.232  
asyik.eepis-its.edu. 43200 IN A 10.252.108.186  
berman.eepis-its.edu. 43200 IN A 10.252.13.235  
binggo.eepis-its.edu. 43200 IN A 10.252.102.170  
CAD-14.eepis-its.edu. 43200 IN A 10.252.106.238  
CAD-16.eepis-its.edu. 43200 IN A 10.252.106.237  
CAD-8.eepis-its.edu. 43200 IN A 10.252.106.233  
CAD-9.eepis-its.edu. 43200 IN A 10.252.106.234  
candra.eepis-its.edu. 43200 IN A 10.252.246.220  
cherry.eepis-its.edu. 43200 IN A 10.252.102.240  
cisco.eepis-its.edu. 86400 IN A 10.252.1.1  
cisco.eepis-its.edu. 86400 IN A 202.154.13.1  
cisco.eepis-its.edu. 86400 IN A 202.154.62.225  
cncmobile.eepis-its.edu. 43200 IN A 10.252.2.253  
comnet.eepis-its.edu. 43200 IN A 10.252.108.247  
ns.comnet.eepis-its.edu. 86400 IN A 10.252.108.14  
compaq.eepis-its.edu. 43200 IN A 10.252.102.189  
compie1.eepis-its.edu. 43200 IN A 10.252.11.252  
core.eepis-its.edu. 43200 IN A 10.252.102.33  
dh202.eepis-its.edu. 43200 IN A 10.252.102.206  
dialogic.eepis-its.edu. 43200 IN A 10.252.108.228  
digitald4.eepis-its.edu. 43200 IN A 10.252.102.206  
dosen.eepis-its.edu. 43200 IN A 10.252.108.156  
dvb.eepis-its.edu. 86400 IN A 202.154.13.3  
eepis-1cn51o8gh.eepis-its.edu. 43200 IN A 10.252.241.219  
eepis-its.eepis-its.edu. 43200 IN A 10.252.242.81  
eepis-ta1.eepis-its.edu. 43200 IN A 10.252.241.230  
eepiselka.eepis-its.edu. 43200 IN A 10.252.110.252  
egroups.eepis-its.edu. 86400 IN A 202.154.62.229  
eis.eepis-its.edu. 86400 IN A 202.154.62.229  
elka-5.eepis-its.edu. 43200 IN A 10.252.11.246  
elka2-d4.eepis-its.edu. 43200 IN A 10.252.102.210  
elkad4.eepis-its.edu. 43200 IN A 10.252.111.238  
enam.eepis-its.edu. 43200 IN A 10.252.108.110  
ent\_crew.eepis-its.edu. 43200 IN A 10.252.2.124

fileserv.eepis-its.edu. 86400 IN A 202.154.62.228  
firewall.eepis-its.edu. 86400 IN A 202.154.13.2  
genahoi.eepis-its.edu. 43200 IN A 10.252.108.153  
gis21.eepis-its.edu. 43200 IN A 10.252.105.193  
google.eepis-its.edu. 43200 IN A 202.154.62.230  
GOODMAN.eepis-its.edu. 43200 IN A 10.252.102.102  
haniah.eepis-its.edu. 43200 IN A 10.252.11.225  
hasbinih.eepis-its.edu. 43200 IN A 10.252.108.48  
hero.eepis-its.edu. 43200 IN A 10.252.102.251  
heru-iswanto.eepis-its.edu. 43200 IN A 10.252.102.196  
heru\_2000.eepis-its.edu. 43200 IN A 10.252.11.245  
highway.eepis-its.edu. 43200 IN A 10.252.102.143  
humaspens.eepis-its.edu. 43200 IN A 10.252.102.202  
ies.eepis-its.edu. 43200 IN A 202.154.62.229  
image.eepis-its.edu. 43200 IN A 10.252.102.238  
INTERNET-02.eepis-its.edu. 43200 IN A 10.252.109.224  
INTERNET-04.eepis-its.edu. 43200 IN A 10.252.109.227  
INTERNET-05.eepis-its.edu. 43200 IN A 10.252.109.252  
INTERNET-06.eepis-its.edu. 43200 IN A 10.252.109.228  
INTERNET-08.eepis-its.edu. 43200 IN A 10.252.109.232  
INTERNET-09.eepis-its.edu. 43200 IN A 10.252.109.234  
INTERNET-10.eepis-its.edu. 43200 IN A 10.252.109.235  
INTERNET-11.eepis-its.edu. 43200 IN A 10.252.109.221  
INTERNET-12.eepis-its.edu. 43200 IN A 10.252.109.220  
INTERNET-13.eepis-its.edu. 43200 IN A 10.252.109.238  
INTERNET-14.eepis-its.edu. 43200 IN A 10.252.109.241  
INTERNET-15.eepis-its.edu. 43200 IN A 10.252.109.240  
INTERNET-16.eepis-its.edu. 43200 IN A 10.252.109.236  
INTERNET-17.eepis-its.edu. 43200 IN A 10.252.109.218  
INTERNET-18.eepis-its.edu. 43200 IN A 10.252.109.213  
INTERNET-20.eepis-its.edu. 43200 IN A 10.252.109.239  
INTERNET-24.eepis-its.edu. 43200 IN A 10.252.109.211  
INTERNET24.eepis-its.edu. 43200 IN A 10.252.109.211  
internet7.eepis-its.edu. 43200 IN A 10.252.109.253  
IPINK.eepis-its.edu. 43200 IN A 10.252.10.248  
iqbal.eepis-its.edu. 43200 IN A 10.252.10.253  
its.eepis-its.edu. 43200 IN A 10.252.108.208  
jarkom.eepis-its.edu. 86400 IN NS ns.jarkom.eepis-its.edu.  
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ns.jarkom.eepis-its.edu. 86400 IN A 10.252.108.236  
jarkom1.eepis-its.edu. 86400 IN NS ns.jarkom1.eepis-its.edu.  
ns.jarkom1.eepis-its.edu. 86400 IN A 10.252.108.234  
jarkom10.eepis-its.edu. 43200 IN A 10.252.108.55  
jarkom2.eepis-its.edu. 43200 IN A 10.252.108.181  
jarkom3.eepis-its.edu. 43200 IN A 10.252.108.151  
jarkom4.eepis-its.edu. 43200 IN A 10.252.108.243  
jarkom5.eepis-its.edu. 43200 IN A 10.252.108.161  
KaUPTjarkomSIM.eepis-its.edu. 43200 IN A 10.252.102.53  
kemahasiswaan.eepis-its.edu. 43200 IN A 10.252.12.235  
Kepegawaian1.eepis-its.edu. 43200 IN A 10.252.12.237  
knight.eepis-its.edu. 43200 IN A 10.252.102.250  
Knoppix.eepis-its.edu. 21600 IN A 10.252.2.251  
komputer-pojok.eepis-its.edu. 43200 IN A 10.252.108.210  
kontrol\0321.eepis-its.edu. 43200 IN A 10.252.10.241  
LAB-DSP.eepis-its.edu. 43200 IN A 10.252.102.231  
lab-optik.eepis-its.edu. 43200 IN A 10.252.11.242  
lab01.eepis-its.edu. 43200 IN A 10.252.20.253  
LABAI03.eepis-its.edu. 43200 IN A 10.252.20.222

LABAI05.eepis-its.edu. 43200 IN A 10.252.20.237  
LABAI08.eepis-its.edu. 43200 IN A 10.252.20.68  
LABAI12.eepis-its.edu. 43200 IN A 10.252.20.254  
LABAI18.eepis-its.edu. 43200 IN A 10.252.20.218  
LABAI28.eepis-its.edu. 43200 IN A 10.252.20.234  
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labkomdigmike.eepis-its.edu. 43200 IN A 10.252.102.108  
lecture.eepis-its.edu. 43200 IN A 10.252.20.235  
lecturer.eepis-its.edu. 86400 IN A 202.154.62.229  
lini.eepis-its.edu. 43200 IN A 10.252.110.238  
linux.eepis-its.edu. 302400 IN A 10.252.241.250  
localhost.eepis-its.edu. 86400 IN A 127.0.0.1  
lulok.eepis-its.edu. 43200 IN A 10.252.102.227  
M8W1E1.eepis-its.edu. 43200 IN A 192.168.10.235  
madyono.eepis-its.edu. 43200 IN A 10.252.11.244  
mail.eepis-its.edu. 86400 IN A 202.154.62.229  
maseko.eepis-its.edu. 43200 IN A 10.252.11.143  
MasterGEBP.eepis-its.edu. 43200 IN A 10.252.102.161  
MATURIP.eepis-its.edu. 43200 IN A 10.252.110.251  
Mia.eepis-its.edu. 43200 IN A 10.252.12.37  
mirror.eepis-its.edu. 86400 IN A 202.154.62.230  
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Muhammad\032Dahlan.eepis-its.edu. 43200 IN A 10.252.10.243  
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ns3.eepis-its.edu. 86400 IN A 202.154.62.228  
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penganiayaan.eepis-its.edu. 43200 IN A 10.252.108.246  
pens-fyy321vi6a.eepis-its.edu. 43200 IN A 10.252.246.155  
pentium4.eepis-its.edu. 43200 IN A 10.252.102.233  
perpusd4.eepis-its.edu. 43200 IN A 10.252.109.254  
PERPUSTAKAAN-23.eepis-its.edu. 43200 IN A 10.252.109.215  
poltek.eepis-its.edu. 43200 IN A 10.252.102.85  
poltek-x2gdcx2h.eepis-its.edu. 43200 IN A 10.252.109.223  
POLTEK22.eepis-its.edu. 43200 IN A 10.252.109.234  
poltekkud4.eepis-its.edu. 43200 IN A 10.252.102.124  
poltekvaio.eepis-its.edu. 43200 IN A 10.252.102.103  
powerlogic.eepis-its.edu. 43200 IN A 10.252.11.253  
prima.eepis-its.edu. 43200 IN A 10.252.102.109  
PROG1-PC008.eepis-its.edu. 43200 IN A 10.252.103.238  
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rgkomdat.eepis-its.edu. 43200 IN A 10.252.11.131  
Robot1.eepis-its.edu. 43200 IN A 10.252.102.181  
Robot3.eepis-its.edu. 43200 IN A 10.252.102.69  
ROBOT99.eepis-its.edu. 43200 IN A 10.252.102.112  
Robotic4.eepis-its.edu. 43200 IN A 10.252.111.111  
RoboticServer.eepis-its.edu. 43200 IN A 10.252.111.217  
ROBOTIK1.eepis-its.edu. 43200 IN A 10.252.111.213  
robotik2.eepis-its.edu. 43200 IN A 10.252.111.212  
rpl.eepis-its.edu. 43200 IN A 10.252.21.209  
sadam.eepis-its.edu. 43200 IN A 10.252.102.114  
satsuki25.eepis-its.edu. 43200 IN A 10.252.102.172  
sembarang.eepis-its.edu. 43200 IN A 10.252.102.195  
sigwa.eepis-its.edu. 43200 IN A 10.252.11.67

siman-club.eepis-its.edu. 43200 IN A 10.252.10.254  
SPP1.eepis-its.edu. 43200 IN A 10.252.11.170  
spp2.eepis-its.edu. 43200 IN A 10.252.11.171  
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student05.eepis-its.edu. 43200 IN A 10.252.21.239  
student07.eepis-its.edu. 43200 IN A 10.252.21.252  
student08.eepis-its.edu. 43200 IN A 10.252.21.228  
student10.eepis-its.edu. 43200 IN A 10.252.20.53  
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student13.eepis-its.edu. 43200 IN A 10.252.20.229  
student18.eepis-its.edu. 43200 IN A 10.252.20.246  
student19.eepis-its.edu. 43200 IN A 10.252.21.247  
student22.eepis-its.edu. 43200 IN A 10.252.21.251  
student24.eepis-its.edu. 43200 IN A 10.252.21.253  
student29.eepis-its.edu. 43200 IN A 10.252.20.245  
student30.eepis-its.edu. 43200 IN A 10.252.20.247  
student\_03.eepis-its.edu. 43200 IN A 10.252.11.167  
student\_06.eepis-its.edu. 43200 IN A 10.252.11.148  
student\_08.eepis-its.edu. 43200 IN A 10.252.11.147  
student\_09.eepis-its.edu. 43200 IN A 10.252.11.146  
student\_10.eepis-its.edu. 43200 IN A 10.252.11.160  
Student\_17.eepis-its.edu. 43200 IN A 10.252.11.49  
student\_18.eepis-its.edu. 43200 IN A 10.252.11.144  
student\_19.eepis-its.edu. 43200 IN A 10.252.11.190  
student\_20.eepis-its.edu. 43200 IN A 10.252.11.161  
Student\_22.eepis-its.edu. 43200 IN A 10.252.11.156  
Student\_24.eepis-its.edu. 43200 IN A 10.252.11.157  
Student\_25.eepis-its.edu. 43200 IN A 10.252.11.158  
Student\_29.eepis-its.edu. 43200 IN A 10.252.11.159  
Student\_34.eepis-its.edu. 43200 IN A 10.252.110.110  
student\_37.eepis-its.edu. 43200 IN A 10.252.11.150  
studnt14.eepis-its.edu. 43200 IN A 10.252.20.251  
tc-203\_08.eepis-its.edu. 43200 IN A 10.252.243.222  
tc-204\_15.eepis-its.edu. 43200 IN A 10.252.244.231  
tc-204\_22.eepis-its.edu. 43200 IN A 10.252.244.230  
tc-204\_24.eepis-its.edu. 43200 IN A 10.252.244.138  
tc-204\_26.eepis-its.edu. 43200 IN A 10.252.244.245  
tc-204\_30.eepis-its.edu. 43200 IN A 10.252.244.254  
telecom-1.eepis-its.edu. 43200 IN A 10.252.11.231  
telkom-2.eepis-its.edu. 43200 IN A 10.252.11.81  
telkom1.eepis-its.edu. 43200 IN A 10.252.11.86  
traffic.eepis-its.edu. 43200 IN A 202.154.62.230  
training-374394.eepis-its.edu. 43200 IN A 10.252.246.224  
turbulence.eepis-its.edu. 43200 IN A 10.252.241.248  
u9e0h7.eepis-its.edu. 43200 IN A 10.252.108.55  
ummb.eepis-its.edu. 86400 IN A 202.154.62.229  
uppm.eepis-its.edu. 43200 IN A 202.154.62.229  
user-avcflf8v3.eepis-its.edu. 43200 IN A 10.252.12.234  
user-h5zq4bm21c.eepis-its.edu. 43200 IN A 10.252.12.201  
user-pgvwglp4ko.eepis-its.edu. 43200 IN A 10.252.11.122  
USERFN.eepis-its.edu. 43200 IN A 10.252.2.251  
Veritron5500.eepis-its.edu. 43200 IN A 10.252.102.66  
wahju-tj.eepis-its.edu. 43200 IN A 10.252.102.230  
wap.eepis-its.edu. 86400 IN A 202.154.13.9  
WorkShop01.eepis-its.edu. 43200 IN A 10.252.10.240  
Workshop05.eepis-its.edu. 43200 IN A 10.252.10.246  
workshop15.eepis-its.edu. 43200 IN A 10.252.241.220  
Workshop2Router.eepis-its.edu. 43200 IN A 10.252.10.245

```
WSC101-36.eepis-its.edu. 43200 IN A 192.168.10.100
wsc101-38.eepis-its.edu. 43200 IN A 10.252.10.236
WSC203-03.eepis-its.edu. 43200 IN A 10.252.10.239
wsc305-01.eepis-its.edu. 43200 IN A 10.252.102.248
WSE101-01.eepis-its.edu. 43200 IN A 10.252.102.88
www.eepis-its.edu. 86400 IN A 202.154.62.229
yati-b3o8trmzvx.eepis-its.edu. 43200 IN A 10.252.241.70
```

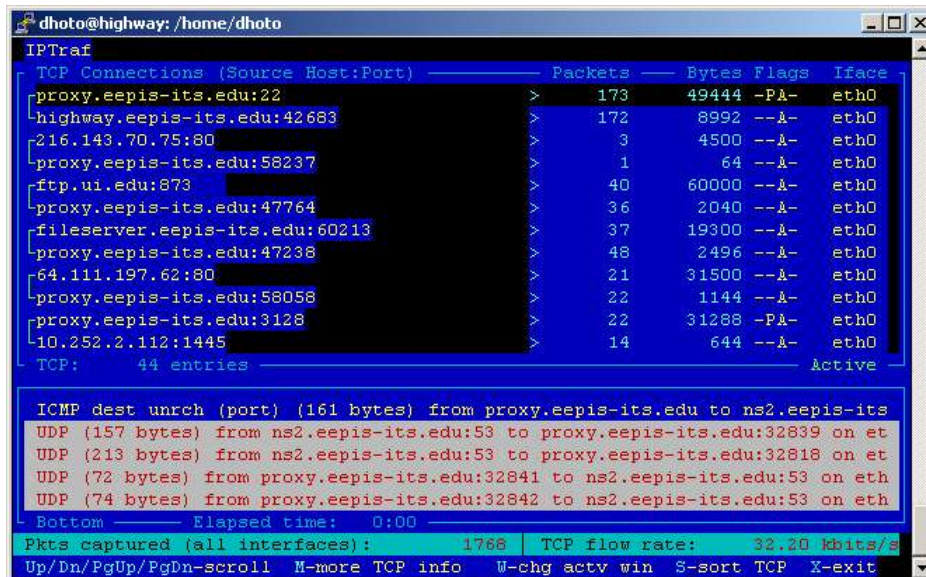
Received 12859 bytes from 202.154.62.227#53 in 32 ms

## IPtraf

Iptraf adalah tools yang digunakan untuk mengukur trafik jaringan berupa TCP maupun UDP

Perintah untuk menjalankan IPTRAF

```
# iptraf
```



```
dhoto@highway: /home/dhoto
IPtraf
TCP Connections (Source Host:Port) ----- Packets ----- Bytes ----- Flags ----- Iface -----
proxy.eepis-its.edu:22 > 173 49444 -PA- eth0
highway.eepis-its.edu:42683 > 172 8992 --A- eth0
216.143.70.75:80 > 3 4500 --A- eth0
proxy.eepis-its.edu:58237 > 1 64 --A- eth0
ftp.ui.edu:873 > 40 60000 --A- eth0
proxy.eepis-its.edu:47764 > 36 2040 --A- eth0
fileservr.eepis-its.edu:60213 > 37 19300 --A- eth0
proxy.eepis-its.edu:47238 > 48 2496 --A- eth0
64.111.197.62:80 > 21 31500 --A- eth0
proxy.eepis-its.edu:58058 > 22 1144 --A- eth0
proxy.eepis-its.edu:3128 > 22 31288 -PA- eth0
10.252.2.112:1445 > 14 644 --A- eth0
TCP: 44 entries ----- Active -----

ICMP dest unrch (port) (161 bytes) from proxy.eepis-its.edu to ns2.eepis-its
UDP (157 bytes) from ns2.eepis-its.edu:53 to proxy.eepis-its.edu:32839 on et
UDP (213 bytes) from ns2.eepis-its.edu:53 to proxy.eepis-its.edu:32818 on et
UDP (72 bytes) from proxy.eepis-its.edu:32841 to ns2.eepis-its.edu:53 on eth
UDP (74 bytes) from proxy.eepis-its.edu:32842 to ns2.eepis-its.edu:53 on eth
Bottom ----- Elapsed time: 0:00 -----
Pkts captured (all interfaces): 1768 | TCP flow rate: 32.20 kbits/s
Up/Dn/PgUp/PgDn-scroll M-more TCP info W-chg actv win S-sort TCP X-exit
```

## Sniffit

Sniffit adalah tool yang digunakan untuk mengintip data yang lewat, perintah untuk melakukan sniffit adalah :

```
# sniffit -I
```



```

dhoto@highway: /home/dhoto
-Sniffit 0.3.7 Beta-
202.154.62.237 3128 -> 10.252.111.212 3853 : Unknown
64.111.197.62 80 -> 202.154.62.237 58457 : HTTP
202.154.62.237 3128
216.143.70.75 80
202.154.62.237 55895
216.155.193.137 5050
209.11.168.242 80
152.118.24.30 873
152.118.24.30 873
64.111.197.58 80
202.154.62.237 3128
10.252.102.143 42683
64.111.197.62 80
202.154.62.237 3128
202.154.62.237 3128 -> 10.252.102.143 43078 : Unknown
10.252.111.212 3851 -> 202.154.62.237 3128 : Unknown
204.9.89.2 80 -> 202.154.62.237 58458 : HTTP

.l#2.....JQa..b..q!..yI...*...F.....$
"D.I2..d.9'..k..Ae...OpbE...B..q$.J..D..R../81..
| .....Ob..L.g4..... . .....BP...k.d.b..
V..U.u.2-.....:.....!N..A...[.D.PY.#c...9.....
W^..A..I@.^..u.....:..+H...z*..... .n...J...\.
...E.Ow...2...;v..p.]<..l...8...v..p-[.....-6..
.gH....D<..^.r...

216.143.70.75 80 -> 202.154.62.237 58237

-Sniffit 0.3.7 Beta-
Source IP : All Source PORT : All
Destination IP: All Destination PORT: All

Masks: F1-Source IP F2-Dest. IP F3-Source Port F4-Dest. Port

```

## Praktikum

1. Lakukan semua perintah-perintah seperti di atas, untuk ping, traceroute, mtr, dan nslookup lakukan dengan target :
  - a. [www.yahoo.com](http://www.yahoo.com)
  - b. [www.detik.com](http://www.detik.com)
  - c. [kebo.vlsm.org](http://kebo.vlsm.org)
  - d. [www.eepis-its.edu](http://www.eepis-its.edu)
  - e. [fileserv.eepis-its.edu](http://fileserv.eepis-its.edu)

Catat hasil dan jelaskan arti dari hasil tersebut

## Tugas

Menyusul