

<https://www.sans.org/reading-room/whitepapers/protocols/analyzing-network-traffic-basic-linux-tools-34037>

```
tcpdump -nn -r fake_av.pcap | wc -l  
tcpdump -nn -r fake_av.pcap | head
```

```
[timestamp] [network protocol] [source  
IP].[source port] > [dest IP].[dest port]
```

```
tcpdump -nn -r fake_av.pcap | cut -f 3 -d  
" " | head
```

```
# Source IP address and port
```

```
tcpdump -nn -r fake_av.pcap 'tcp or udp'  
| cut -f 3 -d " " | head
```

```
# Source IP address
```

```
tcpdump -nn -r fake_av.pcap 'tcp or udp'  
| cut -f 3 -d " " | cut -f 1-4 -d "." |  
head
```

```
# Source IP address and sorted
```

```
tcpdump -nn -r fake_av.pcap 'tcp or udp'
```

```
| cut -f 3 -d " " | cut -f 1-4 -d "." |  
sort | uniq | head
```

```
# Destination IP address
```

```
tcpdump -nn -r fake_av.pcap 'tcp or udp'  
| cut -f 5 -d " " | cut -f 1-4 -d "." |  
sort | uniq | head
```

```
# Destination IP address (top 10)
```

```
tcpdump -nn -r fake_av.pcap 'tcp or udp'  
| cut -f 5 -d " " | cut -f 1-4 -d "." |  
sort | uniq -c | sort -nr | head
```

```
# Destination IP address (SYN flag only  
packets)
```

```
tcpdump -nn -r fake_av.pcap 'tcp[13]=2' |  
cut -f 5 -d " " | sort | uniq -c | sort  
-nr | head
```

```
# DNS traffic
```

```
tcpdump -nn -r fake_av.pcap 'port 53' |  
head -5
```

```
# DNS traffic exclude common TLD
```

```
tcpdump -nn -r fake_av.pcap 'port 53' |  
grep -Ev '(com|net|org|gov|mil|arpa)' |  
cut -f 9 -d " " | head
```

DNS traffic exclude common TLD, find names only

```
tcpdump -nn -r fake_av.pcap 'port 53' |  
grep -Ev '(com|net|org|gov|mil|arpa)' |  
cut -f 8 -d " " | grep -E '[a-z]'
```

open virustotal and paste
<http://puskovayaustanovka.ru>

parse all pcap files in a folder to tcpdump

```
cd /opt/samples/mta  
for capfile in $(ls *.pcap); do tcpdump  
-nn -r $capfile 'port 53' | grep -Ev  
'(com|net|org|gov|mil|arpa)' | cut -f 8  
-d " " | grep -E '[a-z]'; done;
```

parse all pcap files in a folder to tcpdump and find plain text passwords

```
for capfile in $(ls *.pcap); do tcpdump
```

```
-nn -r $capfile port http or port ftp or  
port smtp or port imap or port pop3 or  
port telnet -lA | egrep -i -B5  
'pass=|pwd=|log=|login=|user=|username=|p  
w=|passw=|passwd=  
|password=|pass:|user:|username:|password  
:|login:|pass |user ' ; done;
```