

Exercício Prático Redes

Vitor Lúcio de Oliveira

Nagib Alexandre

João Vitor de Freitas

EX(1)

```
vitor@Bemmo: ~  
  
RX packets 0  bytes 0 (0.0 B)  
RX errors 0  dropped 0  overruns 0  frame 0  
TX packets 0  bytes 0 (0.0 B)  
TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0  
  
lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536  
    inet 127.0.0.1  netmask 255.0.0.0  
    inet6 ::1  prefixlen 128  scopeid 0x10<host>  
    loop txqueuelen 1000  (Local Loopback)  
    RX packets 1256  bytes 319369 (319.3 KB)  
    RX errors 0  dropped 0  overruns 0  frame 0  
    TX packets 1256  bytes 319369 (319.3 KB)  
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0  
  
wlp4s0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500  
    inet 10.250.12.221  netmask 255.255.0.0  broadcast 10.250.255.255  
    inet6 fe80::1954:9e63:7332:8b3  prefixlen 64  scopeid 0x20<link>  
    ether ec:55:f9:49:75:bd  txqueuelen 1000  (Ethernet)  
    RX packets 88427  bytes 42905203 (42.9 MB)  
    RX errors 0  dropped 47  overruns 0  frame 0  
    TX packets 18279  bytes 4853856 (4.8 MB)  
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0
```

EX(1.5)

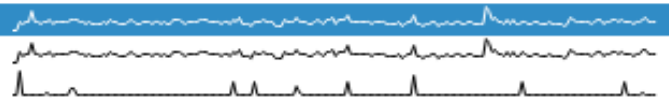
```
vitor@Bemmo:~$ ping 10.250.15.65  
PING 10.250.15.65 (10.250.15.65) 56(84) bytes of data.  
From 10.250.12.221 icmp_seq=1 Destination Host Unreachable  
From 10.250.12.221 icmp_seq=2 Destination Host Unreachable
```

```
vitor@Bemmo:~$ ping 127.0.0.1  
PING 127.0.0.1 (127.0.0.1) 56(84) bytes of data.  
64 bytes from 127.0.0.1: icmp_seq=1 ttl=64 time=0.061 ms  
64 bytes from 127.0.0.1: icmp_seq=2 ttl=64 time=0.272 ms
```

3164	50.167464878	104.16.102.112	10.250.12.221
3165	50.167510772	10.250.12.221	104.16.102.112
3166	50.167543498	104.16.102.112	10.250.12.221
3167	50.167551435	10.250.12.221	104.16.102.112
3168	50.168536243	10.250.0.1	10.250.12.221
3169	50.169063404	10.250.12.221	104.16.102.112

EX(2)

wlp4s0
any
Loopback: lo
enp2s0



EX(3)

Wireshark - Doc - Canva — Mozilla Firefox

exercicio-1.pdf: Projeto e An X Wireshark - Doc - Canva

https://www.canva.com/design/DAGgNdWDa0s/-vTvPdk899ysj-Z-lZzKmw/edit

WhatsApp email ChatGPT

Arquivo Conversão Mágica Edição Wireshark Upgrade Compartilhar

Texto Mágico H1 H2 Open Sans - 12 A B I U S

```

$ ping 10.250.15.65
PING 10.250.15.65 (10.250.15.65) 56(84) bytes of data:
From 10.250.12.221 icmp_seq=1 Destination Host Unreachable
From 10.250.12.221 icmp_seq=2 Destination Host Unreachable

$ ping 127.0.0.1
PING 127.0.0.1 (127.0.0.1) 56(84) bytes of data:
64 bytes from 127.0.0.1: icmp_seq=1 ttl=64 time=0.061 ms
64 bytes from 127.0.0.1: icmp_seq=2 ttl=64 time=0.272 ms
  
```

3164	50.167464878	104.16.102.112	10.250.12.221
3165	50.167510772	10.250.12.221	104.16.102.112
3166	50.167543498	104.16.102.112	10.250.12.221
3167	50.167551435	10.250.12.221	104.16.102.112
3168	50.168536243	10.250.0.1	10.250.12.221
3169	50.169063404	10.250.12.221	104.16.102.112

EX(2)

wlp4s0
any
Loopback: lo
enp2s0

Índice 50%

EX(4)

Capturing from wlp4s0

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Apply a display filter ... <Ctrl-/>

No.	Time	Source	Destination	Protocol	Length	Info
27330	433.259151063	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.13.108? Tell 10.250.0.1
27331	433.264472944	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.1.367? Tell 10.250.0.1
27332	433.346393417	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.14.233? Tell 10.250.0.1
27333	433.367874589	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.12.27? Tell 10.250.0.1
27334	433.475201124	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.0.117? Tell 10.250.0.1
27335	433.557886871	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.2.687? Tell 10.250.0.1
27336	433.617820640	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.12.172? Tell 10.250.0.1
27337	433.617862245	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.12.131? Tell 10.250.0.1
27338	433.619717992	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.14.164? Tell 10.250.0.1
27339	433.668035074	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.14.178? Tell 10.250.0.1
27340	433.677688310	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.7.547? Tell 10.250.0.1
27341	433.689205395	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.10.687? Tell 10.250.0.1
27342	433.708820974	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.6.238? Tell 10.250.0.1
27343	433.733081234	fe80::45b:5403:8d68...	ff02::1:ff0b:5ccc	ICMPv6	86	Neighbor Solicitation for fe80::427:3560:950b:5ccc from 6e:33:3a:45:91:73
27344	433.733702978	fe80::45b:5403:8d68...	ff02::1:ff0b:5ccc	ICMPv6	86	Neighbor Solicitation for fe80::427:3560:950b:5ccc from 6e:33:3a:45:91:73
27345	433.733716175	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.13.187? Tell 10.250.0.1
27346	433.750372269	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.4.196? Tell 10.250.0.1
27347	433.760449023	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.9.627? Tell 10.250.0.1
27348	433.762280512	fe80::1000:6cbd:c7e...	ff02::1:ff69:9989	ICMPv6	86	Neighbor Solicitation for fe80::fad0:27ff:fe69:9989 from 74:40:bb:0e:61:b7
27349	433.763469291	fe80::1000:6cbd:c7e...	ff02::1:ff69:9989	ICMPv6	86	Neighbor Solicitation for fe80::fad0:27ff:fe69:9989 from 74:40:bb:0e:61:b7
27350	433.789016410	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.12.235? Tell 10.250.0.1
27351	433.809046761	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.6.226? Tell 10.250.0.1
27352	433.823982847	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.2.229? Tell 10.250.0.1
27353	433.824440179	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.11.222? Tell 10.250.0.1
27354	433.838151964	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.9.147? Tell 10.250.0.1
27355	433.838196254	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.10.129? Tell 10.250.0.1
27356	433.838223190	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.0.172? Tell 10.250.0.1
27357	433.888516476	fe80::6c25:69ff:fe6...	ff02::2	ICMPv6	70	Router Solicitation from 6e:25:69:61:9f:ac

Frame 3171: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface wlp4s0
Ethernet II, Src: Fortinet_09:00:13 (08:00:0f:09:00:13), Dst: HonHaiPrecis_49:75:bd
Internet Protocol Version 4, Src: 104.16.102.112, Dst: 10.250.12.221
Transmission Control Protocol, Src Port: 443, Dst Port: 48400, Seq: 5651, Ack: 7127,

wlp4s0: <live capture in progress>

Packets: 27357 · Displayed: 27357 (100.0%) Profile: Default

EX(5)

*wlp4s0

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ip.dst== 10.250.12.221

No.	Time	Source	Destination	Protocol	Length	Info
36323	565.035968702	104.16.102.112	10.250.12.221	TCP	1514	443 → 51420 [PSH, ACK] Seq=139615 Ack=1183196 Win=82 Len=1448 TSval=1462531076 TSecr=3229664...
36325	565.041280562	104.16.102.112	10.250.12.221	TCP	1514	443 → 51420 [ACK] Seq=141063 Ack=1183196 Win=82 Len=1448 TSval=1462531079 TSecr=322966452 [T...
36326	565.042412339	104.16.102.112	10.250.12.221	TCP	1514	443 → 51420 [PSH, ACK] Seq=142511 Ack=1183196 Win=82 Len=1448 TSval=1462531079 TSecr=3229664...
36327	565.042412613	104.16.102.112	10.250.12.221	TLSv1.2	535	Application Data
36394	566.246929710	104.16.102.112	10.250.12.221	TCP	66	443 → 51420 [ACK] Seq=144428 Ack=1184584 Win=82 Len=0 TSval=1462532303 TSecr=322967679
36395	566.246977417	104.16.102.112	10.250.12.221	TCP	66	443 → 51420 [ACK] Seq=144428 Ack=1185104 Win=82 Len=0 TSval=1462532304 TSecr=322967679
36396	566.255718202	104.16.102.112	10.250.12.221	TLSv1.2	385	Application Data
36398	566.255804595	104.16.102.112	10.250.12.221	TLSv1.2	99	Application Data
36400	566.255849450	104.16.102.112	10.250.12.221	TLSv1.2	97	Application Data
36451	567.413038792	104.16.102.112	10.250.12.221	TCP	66	443 → 51420 [ACK] Seq=144811 Ack=1187752 Win=83 Len=0 TSval=1462533476 TSecr=322968852
36456	567.439109000	104.16.102.112	10.250.12.221	TLSv1.2	358	Application Data
36458	567.439190365	104.16.102.112	10.250.12.221	TLSv1.2	99	Application Data
36460	567.439219283	104.16.102.112	10.250.12.221	TLSv1.2	97	Application Data
36466	567.623830203	104.16.102.112	10.250.12.221	TLSv1.3	104	Application Data
36473	567.651729724	104.16.102.112	10.250.12.221	TCP	66	443 → 48400 [ACK] Seq=12259 Ack=25637 Win=73728 Len=0 TSval=2146685961 TSecr=322968937
36474	567.651774800	104.16.102.112	10.250.12.221	TCP	66	443 → 48400 [ACK] Seq=12259 Ack=25679 Win=73728 Len=0 TSval=2146685968 TSecr=322969085
36482	567.942991797	104.16.102.112	10.250.12.221	TLSv1.3	104	Application Data
36551	570.103132351	104.16.102.112	10.250.12.221	TLSv1.2	104	Application Data
36558	570.163036391	104.16.102.112	10.250.12.221	TCP	66	443 → 46128 [ACK] Seq=1939 Ack=2143 Win=10 Len=0 TSval=3069247386 TSecr=322971565
36754	573.732176136	2.19.10.138	10.250.12.221	TCP	66	[TCP Keep-Alive ACK] 443 → 36198 [ACK] Seq=971 Ack=3140 Win=64128 Len=0 TSval=2863838975 TSe...
36796	574.752651224	104.16.102.112	10.250.12.221	TLSv1.3	105	Application Data
36815	575.204637337	104.16.102.112	10.250.12.221	TCP	66	443 → 46128 [ACK] Seq=1939 Ack=2185 Win=10 Len=0 TSval=3069252444 TSecr=322976623
36821	575.337220838	104.16.102.112	10.250.12.221	TLSv1.2	104	Application Data
37037	579.708637746	104.16.102.112	10.250.12.221	TCP	66	443 → 51420 [ACK] Seq=145167 Ack=1190295 Win=84 Len=0 TSval=1462545768 TSecr=322981146
37038	579.745605016	104.16.102.112	10.250.12.221	TCP	66	443 → 51420 [ACK] Seq=145167 Ack=1190562 Win=84 Len=0 TSval=1462545810 TSecr=322981146
37041	579.845981919	104.16.102.112	10.250.12.221	TLSv1.2	629	Application Data
37044	579.850597929	104.16.102.112	10.250.12.221	TLSv1.2	118	Application Data
37046	579.850671985	104.16.102.112	10.250.12.221	TLSv1.2	97	Application Data

Frame 3171: 66 bytes on wire (528 bits), 66 bytes captured (528 bits) on interface wlp4s0
Ethernet II, Src: Fortinet_09:00:13 (08:00:0f:09:00:13), Dst: HonHaiPrecis_49:75:bd
Internet Protocol Version 4, Src: 104.16.102.112, Dst: 10.250.12.221
Transmission Control Protocol, Src Port: 443, Dst Port: 48400, Seq: 5651, Ack: 7127,

Destination Address: IPv4 address

Packets: 37108 · Displayed: 2560 (6.9%) Profile: Default

EX(6)


```
vitor@Bemmo:~$ ping 10.250.0.1
PING 10.250.0.1 (10.250.0.1) 56(84) bytes of data.
64 bytes from 10.250.0.1: icmp_seq=1 ttl=255 time=4.24 ms
64 bytes from 10.250.0.1: icmp_seq=2 ttl=255 time=3.87 ms
```

The image shows a Wireshark packet capture window titled "wlp4s0". The filter bar at the top displays the filter: `ip.addr == 10.250.12.221 and icmp.type == 8 and ip.dst == 10.250.0.1`. The packet list on the left shows a series of ICMP Echo (ping) requests and replies. The packet details pane on the right shows the structure of a selected packet (No. 58823), including Ethernet II, Internet Protocol Version 4, and Internet Control Message Protocol (ICMP) fields. The packet bytes pane at the bottom shows the raw data in hexadecimal and ASCII.

No.	Time	Source	Destination	Protocol	Length	Info
58763	908.607315076	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=193/49408, ttl=64 (reply in 58768)
58823	909.608444550	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=194/49664, ttl=64 (reply in 58825)
58865	910.609443290	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=195/49920, ttl=64 (reply in 58866)
58898	911.610482534	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=196/50176, ttl=64 (reply in 58900)
58945	912.611459733	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=197/50432, ttl=64 (reply in 58946)
59004	913.612445763	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=198/50688, ttl=64 (reply in 59005)
59067	914.613443182	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=199/50944, ttl=64 (reply in 59068)
59137	915.615078548	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=200/51200, ttl=64 (reply in 59138)
59194	916.616444969	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=201/51456, ttl=64 (reply in 59197)
59251	917.617516958	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=202/51712, ttl=64 (reply in 59252)
59310	918.618866361	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=203/51968, ttl=64 (reply in 59311)
59354	919.619580354	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=204/52224, ttl=64 (reply in 59362)
59420	920.621422664	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=205/52480, ttl=64 (reply in 59421)
59476	921.622413573	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=206/52736, ttl=64 (reply in 59479)
59623	922.623482805	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=207/52992, ttl=64 (reply in 59624)
59731	923.625486913	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=208/53248, ttl=64 (reply in 59732)
59829	924.626444083	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=209/53504, ttl=64 (reply in 59831)
59956	925.627432468	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=210/53760, ttl=64 (reply in 59961)
60046	926.6284446924	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=211/54016, ttl=64 (reply in 60049)
60121	927.629478776	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=212/54272, ttl=64 (reply in 60122)
60183	928.630412169	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=213/54528, ttl=64 (reply in 60184)
60260	929.631471274	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=214/54784, ttl=64 (reply in 60261)
60317	930.632438669	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=215/55040, ttl=64 (reply in 60318)
60381	931.633442385	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=216/55296, ttl=64 (reply in 60382)
60441	932.634499510	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=217/55552, ttl=64 (reply in 60442)
60501	933.635464709	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=218/55808, ttl=64 (reply in 60502)
60556	934.636484013	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=219/56064, ttl=64 (reply in 60557)
60609	935.637699398	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=220/56320, ttl=64 (reply in 60610)

Frame 3159: 98 bytes on wire (784 bits), 98 bytes captured (784 bits) on interface wlp4s0
 Ethernet II, Src: HonHaiPrecis_49:75:bd (ec:55:f9:49:75:bd), Dst: Fortinet_09:00:13:00:00:00
 Internet Protocol Version 4, Src: 10.250.12.221, Dst: 10.250.0.1
 Internet Control Message Protocol

0000 00 09 0f 09 00 13 ec 55 f9 49 75 bd 08 00 45 00U..Iu...E..
 0010 00 54 07 9f 40 00 40 01 10 39 0a fa 0c dd 0a fa ..T..@..9.....
 0020 00 01 08 00 74 57 0d c6 00 0e f4 22 bf 67 00 00tw.....".g..
 0030 00 00 01 77 02 00 00 00 00 00 11 12 13 14 15w.....
 0040 16 17 18 19 1a 1b 1c 1d 1e 1f 20 21 22 23 24 25!#\$%&'()*+,-./012345
 0050 26 27 28 29 2a 2b 2c 2d 2e 2f 30 31 32 33 34 35
 0060 36 37 67

wireshark_wlp4s0K52K22.pcapng Packets: 60627 · Displayed: 347 (0.6%) Profile: Default

ip.addr == 10.250.12.221 and icmp.type == 8 and ip.dst == 10.250.0.1

ip.addr == 10.250.12.221 and ip.dst == 10.250.0.1

EX(7)

*wlp4s0

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icmp

No.	Time	Source	Destination	Protocol	Length	Info
68085	1044.763045051	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=329/18689, ttl=64 (reply in 68100)
68151	1045.764465518	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=330/18945, ttl=64 (reply in 68152)
68200	1046.766498803	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=331/19201, ttl=64 (reply in 68205)
68253	1047.767835156	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=332/19457, ttl=64 (reply in 68257)
68312	1048.769460951	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=333/19713, ttl=64 (reply in 68313)
68359	1049.770455369	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=334/19969, ttl=64 (reply in 68360)
68397	1050.771442058	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=335/20225, ttl=64 (reply in 68405)
68445	1051.772461691	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=336/20481, ttl=64 (reply in 68450)
68492	1052.774472323	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=337/20737, ttl=64 (reply in 68495)
68544	1053.775451381	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=338/20993, ttl=64 (reply in 68545)
68606	1054.777070330	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=339/21249, ttl=64 (reply in 68609)
68661	1055.778554778	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=340/21505, ttl=64 (reply in 68664)
68719	1056.779452493	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=341/21761, ttl=64 (reply in 68724)
68770	1057.780467543	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=342/22017, ttl=64 (reply in 68771)
68830	1058.781467342	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=343/22273, ttl=64 (reply in 68832)
68885	1059.782437537	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=344/22529, ttl=64 (reply in 68886)
68922	1060.784314850	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=345/22785, ttl=64 (reply in 68943)
68988	1061.785573966	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=346/23041, ttl=64 (reply in 68989)
69076	1062.786447465	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=347/23297, ttl=64 (reply in 69082)
69146	1063.787456132	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=348/23553, ttl=64 (reply in 69184)
69260	1064.788450644	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=349/23809, ttl=64 (reply in 69261)
69320	1065.789411322	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=350/24065, ttl=64 (reply in 69326)
69389	1066.790443731	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=351/24321, ttl=64 (reply in 69390)
69450	1067.791905882	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=352/24577, ttl=64 (reply in 69451)
69515	1068.793460969	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=353/24833, ttl=64 (reply in 69518)
69562	1069.794440786	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=354/25089, ttl=64 (reply in 69564)
69598	1070.796086540	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=355/25345, ttl=64 (reply in 69601)
69670	1071.797451834	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=356/25601, ttl=64 (reply in 69673)
69723	1072.798445242	10.250.12.221	10.250.0.1	ICMP	98	Echo (ping) request id=0x0f04, seq=357/25857, ttl=64 (reply in 69723)

Address: Fortinet_09:00:13 (00:09:0f:09:00:13)
0..... = LG bit: Globally unique address (factory default)
0..... = IG bit: Individual address (unicast)
 Source: NonHAIPrecis_49:75:bd (ec:55:f9:49:75:bd)
 Address: NonHAIPrecis_49:75:bd (ec:55:f9:49:75:bd)
0..... = LG bit: Globally unique address (factory default)
0..... = IG bit: Individual address (unicast)
 Type: IPv4 (0x0800)

0000 00 09 0f 09 00 13 ec 55 f9 49 75 bd 08 00 45 00U..Iu...E
 0010 00 54 7d c7 40 00 40 01 9a 10 0a fa 0c dd 0a faT..@..
 0020 00 01 08 00 1a 18 0f 04 01 57 e4 26 bf 67 00 00W.&g..
 0030 00 00 5f 2b 0c 00 00 00 00 00 10 11 12 13 14 15+.....
 0040 16 17 18 19 1a 1b 1c 1d 1e 1f 20 21 22 23 24 25!""\$%&()
 0050 26 27 28 29 2a 2b 2c 2d 2e 2f 30 31 32 33 34 35/012345
 0060 36 37 67

Specifies if this is an individual (unicast) or group (broadcast/multicast) address (eth.src.ig), 3 bytes

Packets: 178014 · Displayed: 1006 (0.6%) Profile: Default

EX(8)

*wlp4s0

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arp

No.	Time	Source	Destination	Protocol	Length	Info
185559	2066.965669636	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.12.99? Tell 10.250.0.1
185560	2066.975998524	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.3.208? Tell 10.250.0.1
185561	2067.004165839	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.0.58? Tell 10.250.0.1
185562	2067.004210996	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.8.131? Tell 10.250.0.1
185563	2067.017153484	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.12.164? Tell 10.250.0.1
185564	2067.025574882	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.12.113? Tell 10.250.0.1
185565	2067.032970908	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.9.235? Tell 10.250.0.1
185566	2067.051107459	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.10.31? Tell 10.250.0.1
185567	2067.0680952575	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.8.68? Tell 10.250.0.1
185570	2067.104080295	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.5.156? Tell 10.250.0.1
185571	2067.128586352	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.13.10? Tell 10.250.0.1
185572	2067.133789902	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.11.222? Tell 10.250.0.1
185573	2067.158967686	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.1.31? Tell 10.250.0.1
185574	2067.163122910	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.2.222? Tell 10.250.0.1
185575	2067.166605529	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.7.228? Tell 10.250.0.1
185576	2067.294172989	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.2.136? Tell 10.250.0.1
185577	2067.295123581	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.11.172? Tell 10.250.0.1
185578	2067.295159371	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.0.79? Tell 10.250.0.1
185579	2067.295742775	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.14.21? Tell 10.250.0.1
185580	2067.301848434	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.2.185? Tell 10.250.0.1
185581	2067.365405071	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.1.205? Tell 10.250.0.1
185582	2067.368168716	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.1.74? Tell 10.250.0.1
185583	2067.368213983	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.5.226? Tell 10.250.0.1
185584	2067.374233836	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.13.109? Tell 10.250.0.1
185585	2067.374266829	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.9.183? Tell 10.250.0.1
185586	2067.374278728	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.4.175? Tell 10.250.0.1
185587	2067.392244140	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.0.192? Tell 10.250.0.1
185588	2067.401796380	Fortinet_09:00:13	Broadcast	ARP	56	Who has 10.250.10.115? Tell 10.250.0.1

Address: Broadcast (ff:ff:ff:ff:ff:ff)
1..... = LG bit: Locally administered address (this is **not** a public address)
1..... = IG bit: Group address (multicast/broadcast)
 Source: Fortinet_09:00:13 (00:09:0f:09:00:13)
 Address: Fortinet_09:00:13 (00:09:0f:09:00:13)
0..... = LG bit: Globally unique address (factory default)
0..... = IG bit: Individual address (unicast)
 Type: ARP (0x0806)

0000 ff ff ff ff ff ff 00 09 0f 09 00 13 08 06 00 01
 0010 08 00 06 04 00 01 00 09 0f 09 00 13 0a fa 00 011.....
 0020 00 00 00 00 00 00 0a fa 06 69 00 00 00 00 00 00
 0030 00 00 00 00 00 00 00 00

Address Resolution Protocol: Protocol

Packets: 185588 · Displayed: 93208 (50.2%) Profile: Default

*wlp4s0

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arp.opcode == 1

No.	Time	Source	Destination	Protocol	Length	Info
192094	2134.271206815	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.1.61? Tell 10.250.0.1
192095	2134.292090676	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.12.124? Tell 10.250.0.1
192096	2134.313354849	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.10.63? Tell 10.250.0.1
192097	2134.324022866	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.0.80? Tell 10.250.0.1
192098	2134.331348662	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.9.33? Tell 10.250.0.1
192099	2134.332027954	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.12.17? Tell 10.250.0.1
192100	2134.341465362	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.1.33? Tell 10.250.0.1
192101	2134.371312132	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.3.146? Tell 10.250.0.1
192102	2134.379559239	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.5.178? Tell 10.250.0.1
192103	2134.381276081	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.10.130? Tell 10.250.0.1
192106	2134.411118359	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.0.244? Tell 10.250.0.1
192111	2134.451408944	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.1.69? Tell 10.250.0.1
192112	2134.454787068	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.14.227? Tell 10.250.0.1
192113	2134.498746698	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.0.242? Tell 10.250.0.1
192114	2134.501002405	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.14.92? Tell 10.250.0.1
192115	2134.530568566	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.14.102? Tell 10.250.0.1
192116	2134.541223324	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.13.54? Tell 10.250.0.1
192117	2134.551228613	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.11.175? Tell 10.250.0.1
192118	2134.561232939	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.7.39? Tell 10.250.0.1
192119	2134.569080229	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.2.73? Tell 10.250.0.1
192120	2134.591363987	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.12.72? Tell 10.250.0.1
192121	2134.594027987	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.6.14? Tell 10.250.0.1
192122	2134.621318654	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.14.174? Tell 10.250.0.1
192125	2134.625897958	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.0.17? Tell 10.250.0.1
192126	2134.641993173	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.4.175? Tell 10.250.0.1
192127	2134.642042509	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.6.105? Tell 10.250.0.1
192128	2134.691363043	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.7.228? Tell 10.250.0.1
192129	2134.717914195	Fortinet_09...	Broadcast	ARP	56	Who has 10.250.13.10? Tell 10.250.0.1

Address: Broadcast (ff:ff:ff:ff:ff:ff)
1. = LG bit: Locally administered address (this is ...)
1. = IG bit: Group address (multicast/broadcast)
 Source: Fortinet_09:00:13 (00:09:0f:09:00:13)
 Address: Fortinet_09:00:13 (00:09:0f:09:00:13)
0. = LG bit: Globally unique address (factory default)
0. = IG bit: Individual address (unicast)
 Type: ARP (0x0006)

0000 ff ff ff ff ff 00 09 0f 09 00 13 08 06 00 01
 0010 08 00 06 04 00 01 00 09 0f 09 00 13 0a fa 00 01
 0020 00 00 00 00 00 00 0a fa 06 69 00 00 00 00 00
 0030 00 00 00 00 00 00 00 00 00 00 00 00 00 00 1.....

Specifies if this is an individual (unicast) or group (broadcast/multicast) address (eth.src.ig), 3 bytes

Packets: 192131 - Displayed: 97014 (50.5%) Profile: Default

*wlp4s0

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arp.opcode == 2

No.	Time	Source	Destination	Protocol	Length	Info
68067	1044.426276869	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
70991	1092.584352577	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
74403	1154.762745280	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
76571	1191.786823082	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
83433	1225.861906473	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
111562	1264.301848947	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
115780	1298.346384212	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
118986	1341.491143757	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
121591	1375.541834346	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
124449	1412.990809524	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
127000	1449.568769362	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
129894	1483.619441177	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
133572	1513.218600286	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
136116	1542.913132604	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
139782	1590.008943454	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
142347	1625.038240033	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
145083	1658.264275696	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
149188	1687.936018823	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
155620	1737.018184410	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
159813	1792.225470942	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
165134	1857.540816210	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
169418	1895.715541837	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
171764	1921.534680856	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
174170	1947.374428667	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
180403	2005.557982081	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
183005	2036.897405299	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
187111	2085.973891558	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd
194390	2146.353518769	HonHaiPrecis...	Fortinet_0...	ARP	42	10.250.12.221 is at ec:55:f9:49:75:bd

Address: Fortinet_09:00:13 (00:09:0f:09:00:13)
0. = LG bit: Globally unique address (factory default)
0. = IG bit: Individual address (unicast)
 Source: HonHaiPrecis_49:75:bd (ec:55:f9:49:75:bd)
 Address: HonHaiPrecis_49:75:bd (ec:55:f9:49:75:bd)
0. = LG bit: Globally unique address (factory default)
0. = IG bit: Individual address (unicast)
 Type: ARP (0x0006)

0000 00 09 0f 09 00 13 ec 55 f9 49 75 bd 08 06 00 01U..Iu....
 0010 08 00 06 04 00 02 ec 55 f9 49 75 bd 0a fa 0c ddU..Iu....
 0020 00 09 0f 09 00 13 0a fa 00 01 1.....

Specifies if this is an individual (unicast) or group (broadcast/multicast) address (eth.src.ig), 3 bytes

Packets: 197420 - Displayed: 53 (0.0%) Profile: Default

EX(9)

*wlp4s0

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dhcp

No.	Time	Source	Destination	Protocol	Length	Info
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Dynamic Host Configuration Protocol: Protocol

Packets: 226155 · Displayed: 0 (0.0%)

Profile: Default