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Turma: **RED129005**

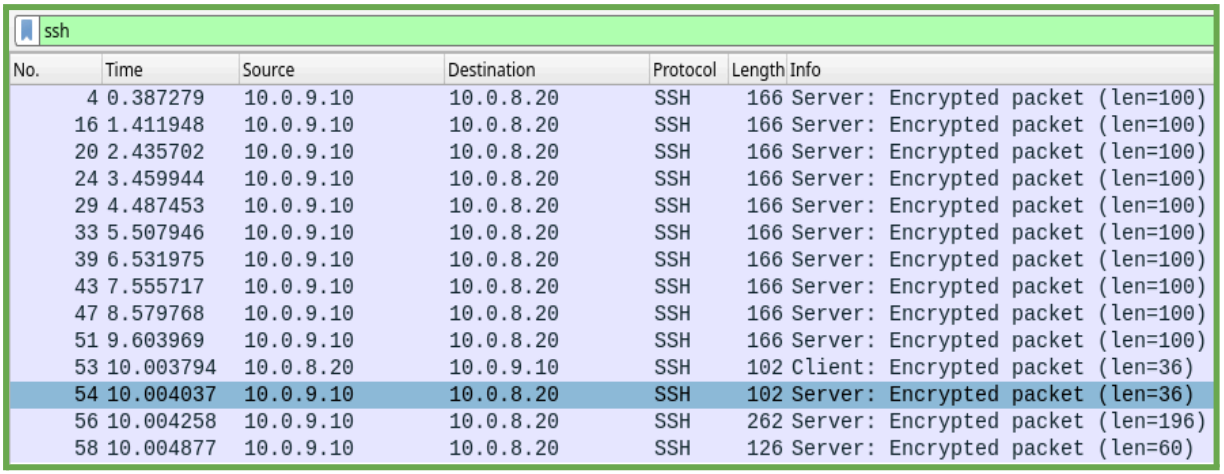
LABORATÓRIO 6

USANDO MINHA MÁQUINA / IFSC

CAMADA DE APLICAÇÃO: COLOCANDO NO "AR" APLICAÇÕES SERVIDORAS

1.0- Servidor SSH

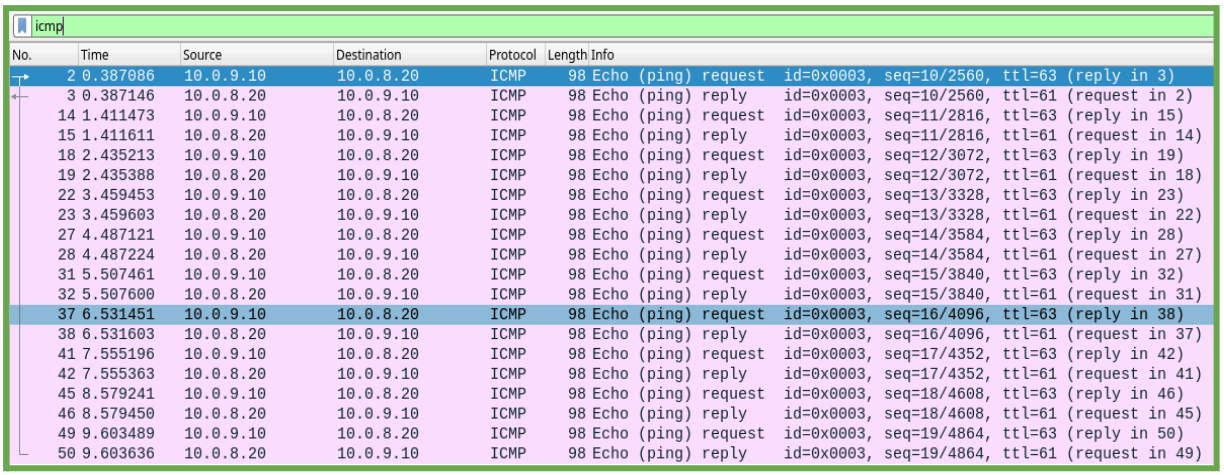
1.1- Recorte a tela do Wireshark, filtrando os pacotes do ssh. Mostre o encapsulamento de pacotes de aplicação e seu posicionamento na estrutura de pacotes.



ssh

No.	Time	Source	Destination	Protocol	Length	Info
4	0.387279	10.0.9.10	10.0.8.20	SSH	166	Server: Encrypted packet (len=100)
16	1.411948	10.0.9.10	10.0.8.20	SSH	166	Server: Encrypted packet (len=100)
20	2.435702	10.0.9.10	10.0.8.20	SSH	166	Server: Encrypted packet (len=100)
24	3.459944	10.0.9.10	10.0.8.20	SSH	166	Server: Encrypted packet (len=100)
29	4.487453	10.0.9.10	10.0.8.20	SSH	166	Server: Encrypted packet (len=100)
33	5.507946	10.0.9.10	10.0.8.20	SSH	166	Server: Encrypted packet (len=100)
39	6.531975	10.0.9.10	10.0.8.20	SSH	166	Server: Encrypted packet (len=100)
43	7.555717	10.0.9.10	10.0.8.20	SSH	166	Server: Encrypted packet (len=100)
47	8.579768	10.0.9.10	10.0.8.20	SSH	166	Server: Encrypted packet (len=100)
51	9.603969	10.0.9.10	10.0.8.20	SSH	166	Server: Encrypted packet (len=100)
53	10.003794	10.0.8.20	10.0.9.10	SSH	102	Client: Encrypted packet (len=36)
54	10.004037	10.0.9.10	10.0.8.20	SSH	102	Server: Encrypted packet (len=36)
56	10.004258	10.0.9.10	10.0.8.20	SSH	262	Server: Encrypted packet (len=196)
58	10.004877	10.0.9.10	10.0.8.20	SSH	126	Server: Encrypted packet (len=60)

1.2- Recorte a tela do Wireshark, filtrando os pacotes do icmp. Comprovando que os pacotes do ping estão passando pelo router 2



icmp

No.	Time	Source	Destination	Protocol	Length	Info
2	0.387086	10.0.9.10	10.0.8.20	ICMP	98	Echo (ping) request id=0x0003, seq=10/2560, ttl=63 (reply in 3)
3	0.387146	10.0.8.20	10.0.9.10	ICMP	98	Echo (ping) reply id=0x0003, seq=10/2560, ttl=61 (request in 2)
14	1.411473	10.0.9.10	10.0.8.20	ICMP	98	Echo (ping) request id=0x0003, seq=11/2816, ttl=63 (reply in 15)
15	1.411611	10.0.8.20	10.0.9.10	ICMP	98	Echo (ping) reply id=0x0003, seq=11/2816, ttl=61 (request in 14)
18	2.435213	10.0.9.10	10.0.8.20	ICMP	98	Echo (ping) request id=0x0003, seq=12/3072, ttl=63 (reply in 19)
19	2.435388	10.0.8.20	10.0.9.10	ICMP	98	Echo (ping) reply id=0x0003, seq=12/3072, ttl=61 (request in 18)
22	3.459453	10.0.9.10	10.0.8.20	ICMP	98	Echo (ping) request id=0x0003, seq=13/3328, ttl=63 (reply in 23)
23	3.459603	10.0.8.20	10.0.9.10	ICMP	98	Echo (ping) reply id=0x0003, seq=13/3328, ttl=61 (request in 22)
27	4.487121	10.0.9.10	10.0.8.20	ICMP	98	Echo (ping) request id=0x0003, seq=14/3584, ttl=63 (reply in 28)
28	4.487224	10.0.8.20	10.0.9.10	ICMP	98	Echo (ping) reply id=0x0003, seq=14/3584, ttl=61 (request in 27)
31	5.507461	10.0.9.10	10.0.8.20	ICMP	98	Echo (ping) request id=0x0003, seq=15/3840, ttl=63 (reply in 32)
32	5.507600	10.0.8.20	10.0.9.10	ICMP	98	Echo (ping) reply id=0x0003, seq=15/3840, ttl=61 (request in 31)
37	6.531451	10.0.9.10	10.0.8.20	ICMP	98	Echo (ping) request id=0x0003, seq=16/4096, ttl=63 (reply in 38)
38	6.531603	10.0.8.20	10.0.9.10	ICMP	98	Echo (ping) reply id=0x0003, seq=16/4096, ttl=61 (request in 37)
41	7.555196	10.0.9.10	10.0.8.20	ICMP	98	Echo (ping) request id=0x0003, seq=17/4352, ttl=63 (reply in 42)
42	7.555363	10.0.8.20	10.0.9.10	ICMP	98	Echo (ping) reply id=0x0003, seq=17/4352, ttl=61 (request in 41)
45	8.579241	10.0.9.10	10.0.8.20	ICMP	98	Echo (ping) request id=0x0003, seq=18/4608, ttl=63 (reply in 46)
46	8.579450	10.0.8.20	10.0.9.10	ICMP	98	Echo (ping) reply id=0x0003, seq=18/4608, ttl=61 (request in 45)
49	9.603489	10.0.9.10	10.0.8.20	ICMP	98	Echo (ping) request id=0x0003, seq=19/4864, ttl=63 (reply in 50)
50	9.603636	10.0.8.20	10.0.9.10	ICMP	98	Echo (ping) reply id=0x0003, seq=19/4864, ttl=61 (request in 49)

2.0- Servidor DNS

2.4- ping casa.redes.edu.br

```
root@ssh:/# echo nameserver 10.0.6.10 >> /etc/resolv.conf
root@ssh:/# ping casa.redes.edu.br
PING casa.redes.edu.br (10.0.8.21) 56(84) bytes of data.
64 bytes from 10.0.8.21 (10.0.8.21): icmp_seq=1 ttl=60 time=0.088 ms
64 bytes from 10.0.8.21 (10.0.8.21): icmp_seq=2 ttl=60 time=0.108 ms
64 bytes from 10.0.8.21 (10.0.8.21): icmp_seq=3 ttl=60 time=0.128 ms
^C
--- casa.redes.edu.br ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2055ms
rtt min/avg/max/mdev = 0.088/0.108/0.128/0.016 ms
root@ssh:/#
```

2.5-dig apelido.redes.edu.br

```
root@DNS_Server:/etc/bind# dig apelido.redes.edu.br

; <<>> DiG 9.18.33-1~deb12u2-Debian <<>> apelido.redes.edu.br
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 29638
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 2, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 1232
; COOKIE: f3e399853406f8c00100000068d6f3589d44c7d772e2e4c9 (good)
;; QUESTION SECTION:
;apelido.redes.edu.br.          IN      A

;; ANSWER SECTION:
apelido.redes.edu.br.   86400   IN      CNAME   mail.redes.edu.br.
mail.redes.edu.br.      86400   IN      A       10.0.6.10

;; Query time: 0 msec
;; SERVER: 10.0.6.10#53(10.0.6.10) (UDP)
;; WHEN: Fri Sep 26 20:11:04 UTC 2025
;; MSG SIZE  rcvd: 112
```

- **Qual foi o resultado obtido?**

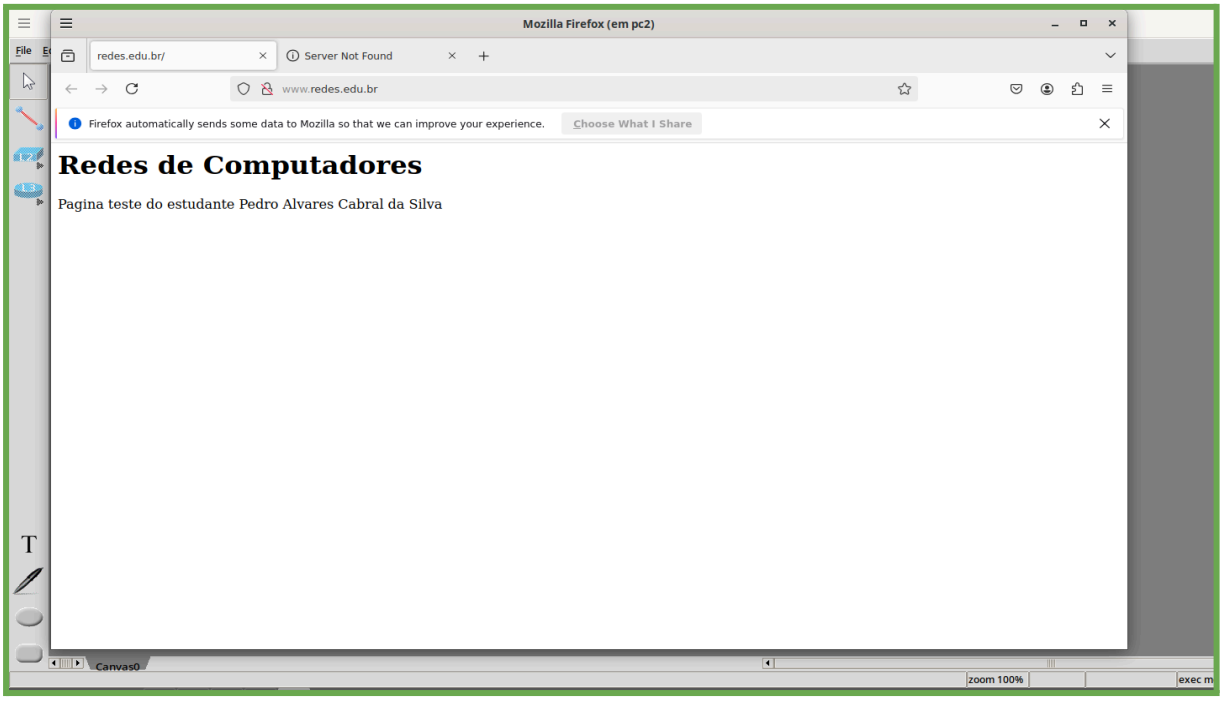
  Aqui nos mostra, como nos definimos, apelido.redes.edu.br sendo um CNAME para mail.redes.edu.br

- **Qual o significado?**

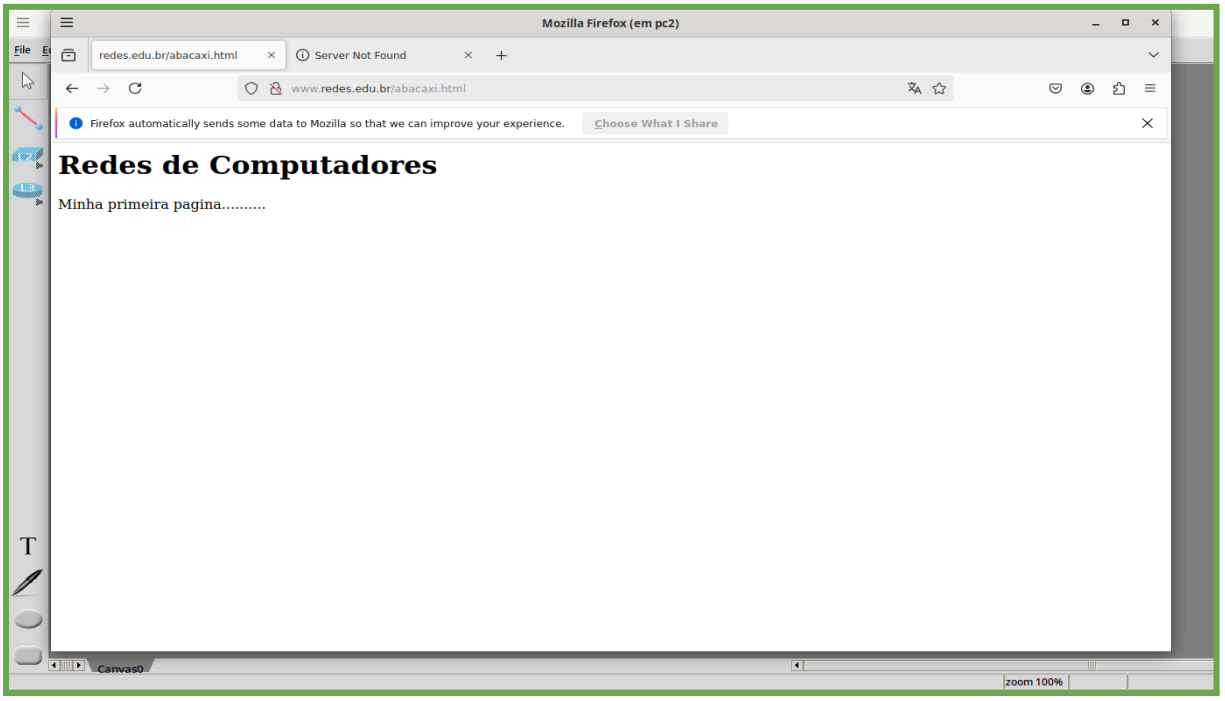
  Que está configurado computador que tente se conectar ao apelido.redes.edu.br seja, na verdade, redirecionado para o mesmo servidor que responde por mail.redes.edu.br (o servidor com IP 10.0.6.10).

3.0 Servidor WEB

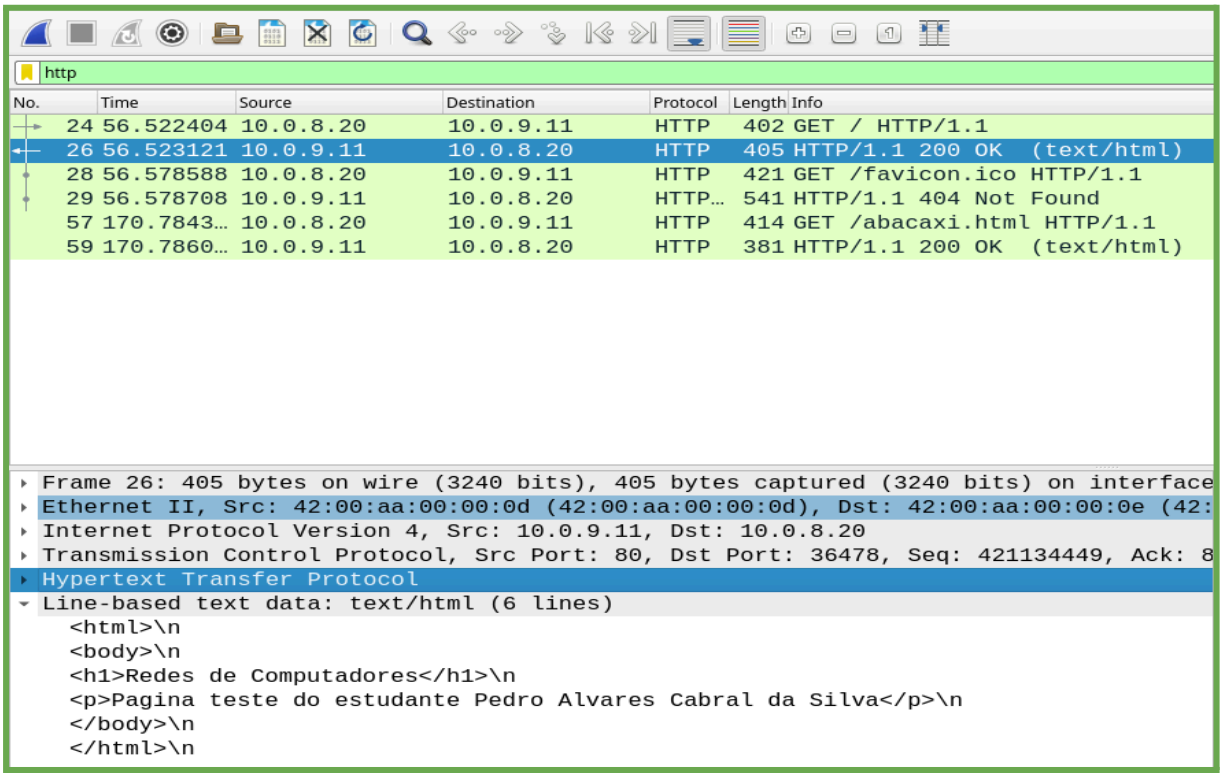
nano index.html



nano abacaxi.html



Wireshark conteúdo de www.redes.edu.br.



Wireshark conteúdo de www.redes.edu.br/abacaxi.html