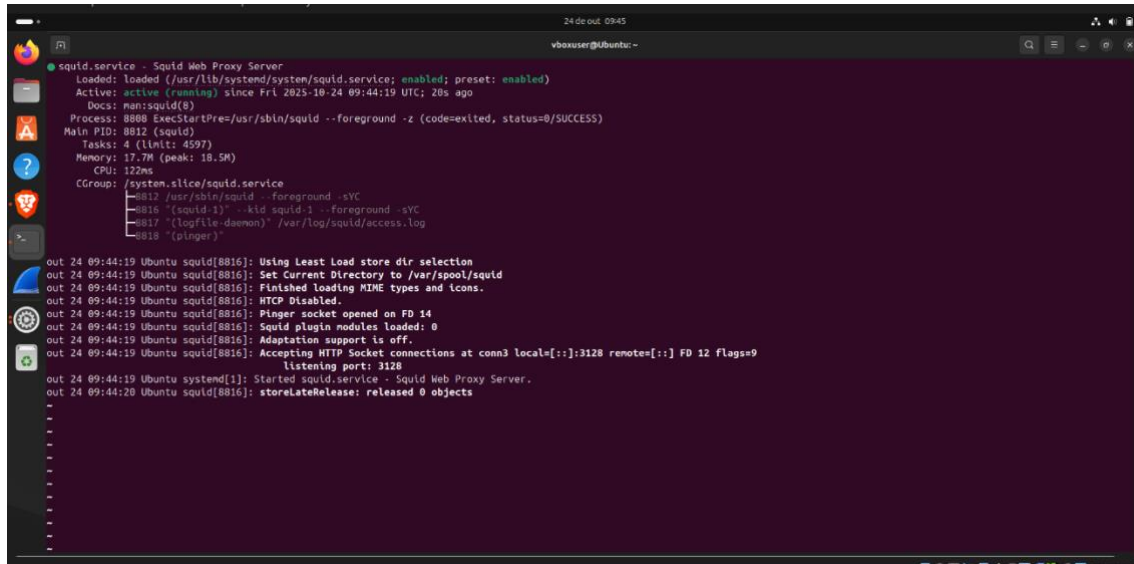


Francisco Martins

Miguel Marques

HTTP Proxy

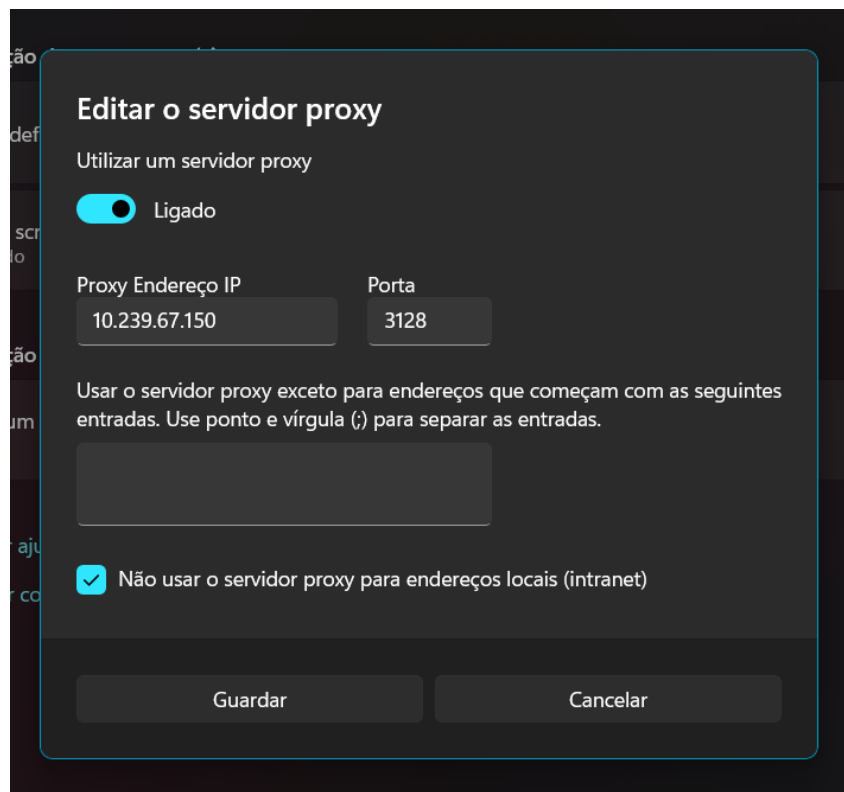
Menu de status do Squid



```
squid.service - Squid Web Proxy Server
Loaded: loaded (/usr/lib/systemd/system/squid.service; enabled; preset: enabled)
Active: active (running) since Fri 2023-10-24 09:44:19 UTC; 20s ago
Docs: man:squid(8)
Process: 8808 ExecStartPre=/usr/sbin/squid --foreground -z (code=exited, status=0/SUCCESS)
Main PID: 8812 (squid)
Tasks: 4 (limit: 4597)
Memory: 17.7M (peak: 18.5M)
CPU: 122ms
CGroup: /system.slice/squid.service
├─8812 /usr/sbin/squid --foreground -sVC
├─8816 "(squid-1)" --kid squid-1 --foreground -sVC
├─8817 "(logfile-daemon)" /var/log/squid/access.log
└─8818 "(pinger)"

out 24 09:44:19 Ubuntu squid[8816]: Using Least Load store dir selection
out 24 09:44:19 Ubuntu squid[8816]: Set Current Directory to /var/spool/squid
out 24 09:44:19 Ubuntu squid[8816]: Finished loading MIME types and tcons.
out 24 09:44:19 Ubuntu squid[8816]: HTTP Disabled.
out 24 09:44:19 Ubuntu squid[8816]: Pinger socket opened on FD 14
out 24 09:44:19 Ubuntu squid[8816]: Squid plugin modules loaded: 0
out 24 09:44:19 Ubuntu squid[8816]: Adaptation support is off.
out 24 09:44:19 Ubuntu squid[8816]: Accepting HTTP Socket connections at conn3 locals[::]:3128 remotes[::]: FD 12 flags=9
out 24 09:44:19 Ubuntu systemd[1]: Started squid.service - Squid Web Proxy Server.
out 24 09:44:20 Ubuntu squid[8816]: storeLateRelease: released 0 objects
```

IP e Porta do proxy na maquina real



Editar o servidor proxy

Utilizar um servidor proxy

☒ Ligado

Proxy Endereço IP: 10.239.67.150 Porta: 3128

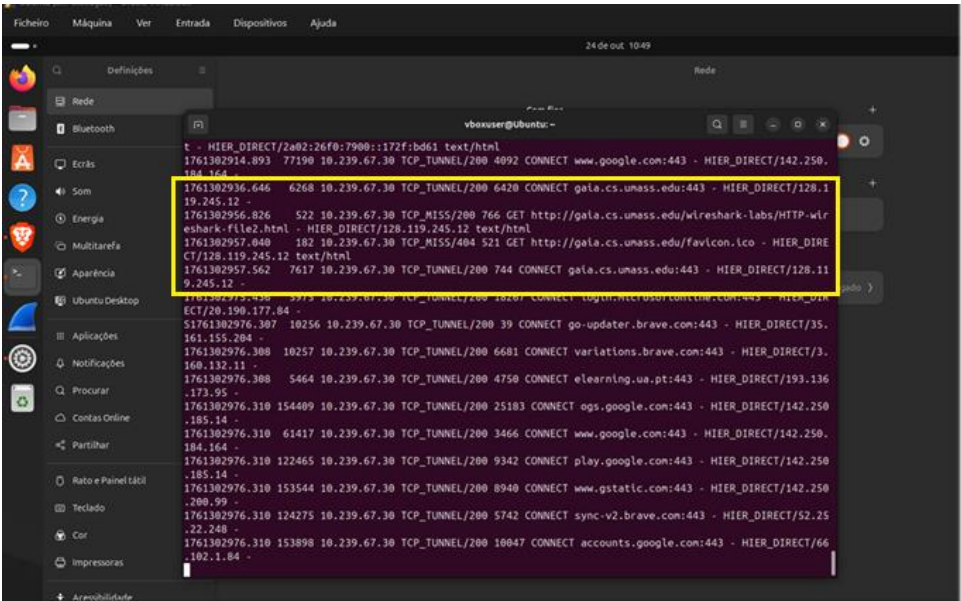
Usar o servidor proxy exceto para endereços que começam com as seguintes entradas. Use ponto e vírgula (;) para separar as entradas.

☒ Não usar o servidor proxy para endereços locais (intranet)

Guardar Cancelar

EX4:

Foi usado este código “sudo tail -f /var/log/squid/access.log” para ver se o proxy estava a funcionar e abriu a seguinte aba:

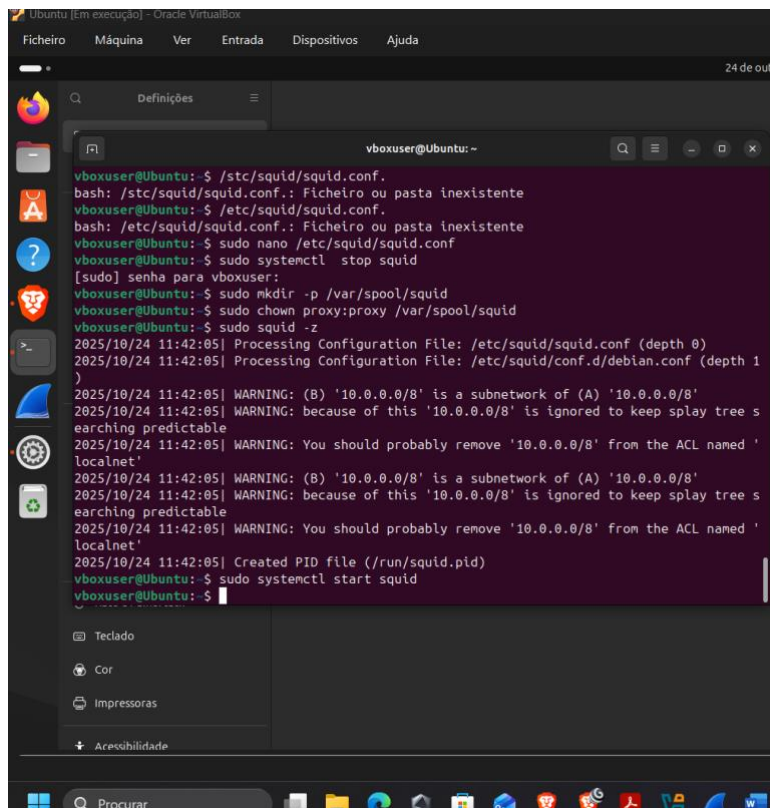


De seguida fomos ao wireshark para confirmar e ver as diferenças, como esta marcado

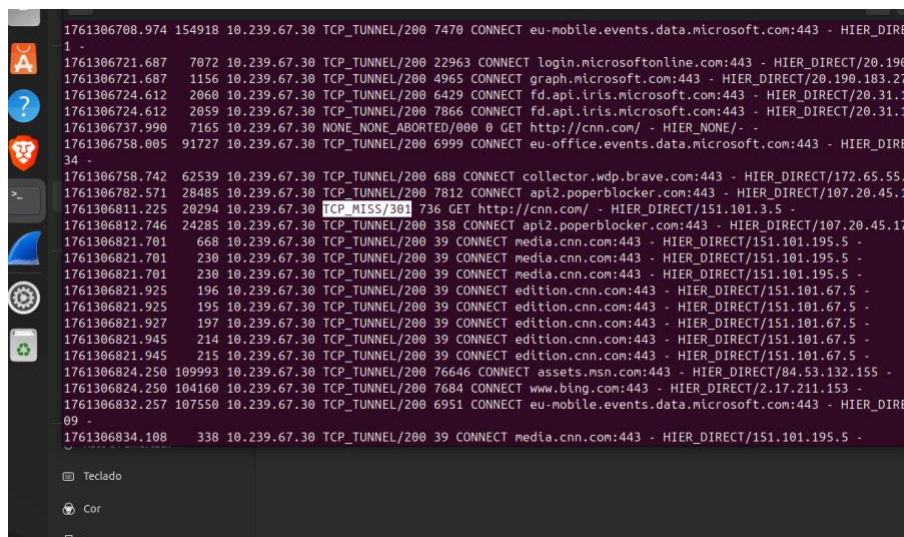
No.	Time	Source	Destination	Protocol	Length	Info
76	29.768015	10.239.67.150	128.119.245.12	HTTP	603	GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1
79	30.036856	128.119.245.12	10.239.67.150	HTTP	796	HTTP/1.1 200 OK (text/html)
82	30.069881	10.239.67.150	128.119.245.12	HTTP	588	GET /favicon.ico HTTP/1.1
85	30.250988	128.119.245.12	10.239.67.150	HTTP	550	HTTP/1.1 404 Not Found (text/html)

Frame 76: 603 bytes on wire (4824 bits), 603 bytes captured (4824 bits) on interface \Device\NPF_{9090C02D-CA...}	0000	de aa ea a7 bb
Ethernet II, Src: Intel_d7:9a:51 (c4:ff:99:d7:9a:51), Dst: de:aa:ea:a7:bb:e0 (de:aa:ea:a7:bb:e0)	0010	02 4d e6 ae 40
Internet Protocol Version 4, Src: 10.239.67.150, Dst: 128.119.245.12	0020	f5 0c ea 84 00
Transmission Control Protocol, Src Port: 60036, Dst Port: 80, Seq: 1, Ack: 1, Len: 537	0030	01 f6 7d 4d 00
Hypertext Transfer Protocol	0040	13 b8 47 45 54
GET /wireshark-labs/HTTP-wireshark-file2.html HTTP/1.1\r\n	0050	2d 6c 61 62 73
Host: gaia.cs.umass.edu\r\n	0060	68 61 72 6b 2d
Upgrade-Insecure-Requests: 1\r\n	0070	48 54 54 50 2f
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/141.0.f...	0080	67 61 69 61 2e
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8\r	0090	75 0d 0a 55 70
Sec-GPC: 1\r\n	00a0	75 72 65 2d 52
Accept-Encoding: gzip, deflate\r\n	00b0	0a 55 73 65 72
Accept-Language: pt-PT;q=0.9\r\n	00c0	69 6c 6c 61 2f
Via: 1.1 Ubuntu (squid/6.13)\r\n	00d0	73 20 4e 54 20
X-Forwarded-For: 10.239.67.30\r\n	00e0	3b 20 78 36 34
Cache-Control: max-age=259200\r\n	00f0	69 74 2f 35 33
Connection: keep-alive\r\n	0100	2c 20 6c 69 6b
\r\n	0110	72 6f 6d 65 2f
[Response in frame 79]	0120	61 66 61 72 69
[Full request URI: http://gaia.cs.umass.edu/wireshark-labs/HTTP-wireshark-file2.html]	0130	63 65 70 74 3a
	0140	61 70 78 6c 69
	0150	6c 3b 20 78 6d 6f

Fomos ver o cache do Proxy



```
vboxuser@Ubuntu: ~  
vboxuser@Ubuntu:~$ /etc/squid/squid.conf.  
bash: /etc/squid/squid.conf.: Ficheiro ou pasta inexistente  
vboxuser@Ubuntu:~$ /etc/squid/squid.conf.  
bash: /etc/squid/squid.conf.: Ficheiro ou pasta inexistente  
vboxuser@Ubuntu:~$ sudo nano /etc/squid/squid.conf  
vboxuser@Ubuntu:~$ sudo systemctl stop squid  
[sudo] senha para vboxuser:  
vboxuser@Ubuntu:~$ sudo mkdir -p /var/spool/squid  
vboxuser@Ubuntu:~$ sudo chown proxy:proxy /var/spool/squid  
vboxuser@Ubuntu:~$ sudo squid -z  
2025/10/24 11:42:05| Processing Configuration File: /etc/squid/squid.conf (depth 0)  
2025/10/24 11:42:05| Processing Configuration File: /etc/squid/conf.d/debian.conf (depth 1)  
2025/10/24 11:42:05| WARNING: (B) '10.0.0.0/8' is a subnetwork of (A) '10.0.0.0/8'  
2025/10/24 11:42:05| WARNING: because of this '10.0.0.0/8' is ignored to keep splay tree searching predictable  
2025/10/24 11:42:05| WARNING: You should probably remove '10.0.0.0/8' from the ACL named 'localnet'  
2025/10/24 11:42:05| WARNING: (B) '10.0.0.0/8' is a subnetwork of (A) '10.0.0.0/8'  
2025/10/24 11:42:05| WARNING: because of this '10.0.0.0/8' is ignored to keep splay tree searching predictable  
2025/10/24 11:42:05| WARNING: You should probably remove '10.0.0.0/8' from the ACL named 'localnet'  
2025/10/24 11:42:05| Created PID file (/run/squid.pid)  
vboxuser@Ubuntu:~$ sudo systemctl start squid  
vboxuser@Ubuntu:~$
```



```
1761306708.974 154918 10.239.67.30 TCP_TUNNEL/200 7470 CONNECT eu-mobile.events.data.microsoft.com:443 - HIER_DIRECT/10.239.67.30  
1761306721.687 7072 10.239.67.30 TCP_TUNNEL/200 22963 CONNECT login.microsoftonline.com:443 - HIER_DIRECT/20.190.183.27  
1761306721.687 1156 10.239.67.30 TCP_TUNNEL/200 4965 CONNECT graph.microsoft.com:443 - HIER_DIRECT/20.190.183.27  
1761306724.612 2060 10.239.67.30 TCP_TUNNEL/200 6429 CONNECT fd.api.iris.microsoft.com:443 - HIER_DIRECT/20.31.255.100  
1761306724.612 2059 10.239.67.30 TCP_TUNNEL/200 7866 CONNECT fd.api.iris.microsoft.com:443 - HIER_DIRECT/20.31.255.100  
1761306737.990 7165 10.239.67.30 NONE_NONE_ABORTED/000 0 GET http://cnn.com/ - HIER_NONE/-  
1761306758.005 91727 10.239.67.30 TCP_TUNNEL/200 6999 CONNECT eu-office.events.data.microsoft.com:443 - HIER_DIRECT/10.239.67.30  
1761306758.742 62539 10.239.67.30 TCP_TUNNEL/200 688 CONNECT collector.wdp.brave.com:443 - HIER_DIRECT/172.65.55.113  
1761306782.571 28485 10.239.67.30 TCP_TUNNEL/200 7812 CONNECT api2.poperblocker.com:443 - HIER_DIRECT/107.20.45.113  
1761306811.225 20294 10.239.67.30 TCP_MISS/301 736 GET http://cnn.com/ - HIER_DIRECT/151.101.3.5  
1761306812.746 24285 10.239.67.30 TCP_TUNNEL/200 358 CONNECT api2.poperblocker.com:443 - HIER_DIRECT/107.20.45.113  
1761306821.701 668 10.239.67.30 TCP_TUNNEL/200 39 CONNECT media.cnn.com:443 - HIER_DIRECT/151.101.195.5  
1761306821.701 230 10.239.67.30 TCP_TUNNEL/200 39 CONNECT media.cnn.com:443 - HIER_DIRECT/151.101.195.5  
1761306821.701 230 10.239.67.30 TCP_TUNNEL/200 39 CONNECT media.cnn.com:443 - HIER_DIRECT/151.101.195.5  
1761306821.925 196 10.239.67.30 TCP_TUNNEL/200 39 CONNECT edition.cnn.com:443 - HIER_DIRECT/151.101.67.5  
1761306821.925 195 10.239.67.30 TCP_TUNNEL/200 39 CONNECT edition.cnn.com:443 - HIER_DIRECT/151.101.67.5  
1761306821.927 197 10.239.67.30 TCP_TUNNEL/200 39 CONNECT edition.cnn.com:443 - HIER_DIRECT/151.101.67.5  
1761306821.945 214 10.239.67.30 TCP_TUNNEL/200 39 CONNECT edition.cnn.com:443 - HIER_DIRECT/151.101.67.5  
1761306821.945 215 10.239.67.30 TCP_TUNNEL/200 39 CONNECT edition.cnn.com:443 - HIER_DIRECT/151.101.67.5  
1761306824.250 109993 10.239.67.30 TCP_TUNNEL/200 76646 CONNECT assets.msn.com:443 - HIER_DIRECT/84.53.132.155  
1761306824.250 104160 10.239.67.30 TCP_TUNNEL/200 7684 CONNECT www.bing.com:443 - HIER_DIRECT/2.17.211.153  
1761306832.257 107550 10.239.67.30 TCP_TUNNEL/200 6951 CONNECT eu-mobile.events.data.microsoft.com:443 - HIER_DIRECT/10.239.67.30  
1761306834.108 338 10.239.67.30 TCP_TUNNEL/200 39 CONNECT media.cnn.com:443 - HIER_DIRECT/151.101.195.5
```

Bloqueamos o domínio

```
vboxuser@Ubuntu: ~  
GNU nano 7.2 /etc/squid/squid.conf *  
include /etc/squid/conf.d/*.conf  
  
# For example, to allow access from your local networks, you may uncomment the  
# following rule (and/or add rules that match your definition of "local"):  
# http_access allow localnet  
  
# And finally deny all other access to this proxy  
acl localnet src 10.0.0.0/8  
acl sites_bloqueados dstdomain .facebook.com .fb.com .instagram.com  
http_access deny sites_bloqueados  
http_access allow localnet  
  
http_access deny all  
  
# TAG: adapted_http_access  
#   Allowing or Denying access based on defined access lists  
#  
#   Essentially identical to http_access, but runs after redirectors  
#   and ICAP/eCAP adaptation. Allowing access control based on their  
#   output.  
#  
#   If not set then only http_access is used.  
  
^G Ajuda ^O Gravar ^W Procurar ^K Cortar ^T Executar ^C Posição M-U Desfazer  
^X Sair ^R Carregar ^\ Substituir ^U Colar ^J Justificar ^/ Ir p/ linha M-E Refazer
```

