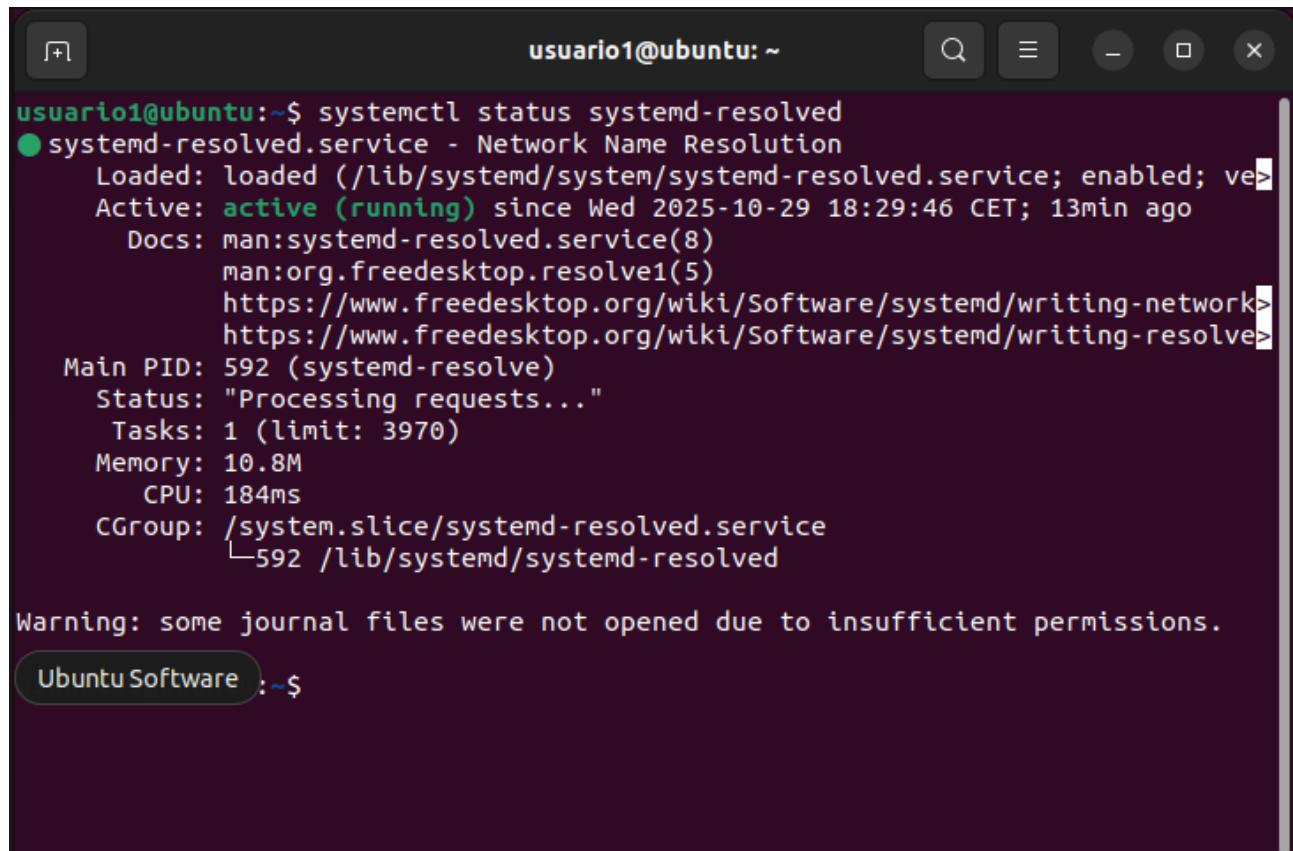


DNS CACHÉ

To resolve this activity, we will use a virtual machine with Ubuntu.

Ubuntu uses systemd-resolved to manage DNS caching. To check if the service is active:

- “systemctl status systemd-resolved”



```
usuario1@ubuntu:~$ systemctl status systemd-resolved
● systemd-resolved.service - Network Name Resolution
  Loaded: loaded (/lib/systemd/system/systemd-resolved.service; enabled; vesion=25)
  Active: active (running) since Wed 2025-10-29 18:29:46 CET; 13min ago
    Docs: man:systemd-resolved.service(8)
           man:org.freedesktop.resolve1(5)
           https://www.freedesktop.org/wiki/Software/systemd/writing-network-configuration-files/
           https://www.freedesktop.org/wiki/Software/systemd/writing-resolvconf-substituted-
  Main PID: 592 (systemd-resolve)
    Status: "Processing requests..."
      Tasks: 1 (limit: 3970)
     Memory: 10.8M
        CPU: 184ms
      CGroup: /system.slice/systemd-resolved.service
              └─592 /lib/systemd/systemd-resolved

Warning: some journal files were not opened due to insufficient permissions.

Ubuntu Software :~$
```

Now, we will view DNS cache statistics:

- “resolvectl statistics”

```
usuario1@ubuntu: ~
CPU: 184ms
CGroup: /system.slice/systemd-resolved.service
└─592 /lib/systemd/systemd-resolved

Warning: some journal files were not opened due to insufficient permissions.

usuario1@ubuntu:~$ resolvectl statistics
DNSSEC supported by current servers: no

Transactions
Current Transactions: 0
Total Transactions: 109

Cache
Current Cache Size: 3
Cache Hits: 32
Cache Misses: 87

DNSSEC Verdicts
Secure: 0
Insecure: 0
Bogus: 0
Indeterminate: 0
usuario1@ubuntu:~$
```

Querying a specific domain:

- “resolvectl query example.com”

```
usuario1@ubuntu:~$ resolvectl query google.com
google.com: 2001:4860:4802:32::78          -- link: enp0s3
                           216.239.38.120        -- link: enp0s3
                           ↳ forcefsafe.google.com
Ubuntu Software
-- Information acquired via protocol DNS in 12.5ms.
-- Data is authenticated: no; Data was acquired via local or encrypted transpor
t: no
-- Data from: network
usuario1@ubuntu:~$
```