

Day 29

Exploitation Analyst

Security Patching:

What is Security Patching in Ubuntu?

Security patching means applying security updates released by Ubuntu to fix vulnerabilities in packages like OpenSSL, Apache, kernel, etc.

- These updates are published in dedicated security repositories.
- Keeping them enabled and up to date is essential for hardening a system against known exploits (e.g., buffer overflows, privilege escalation)

Role of `/etc/apt/sources.list`

This file tells apt where to fetch updates/packages from — including:

Repo Type	Purpose
main	Official supported packages
universe	Community-maintained packages
security	Security patches for core packages
updates	Bug fixes and minor updates

To enable security patching, your `/etc/apt/sources.list` must include the security repo.

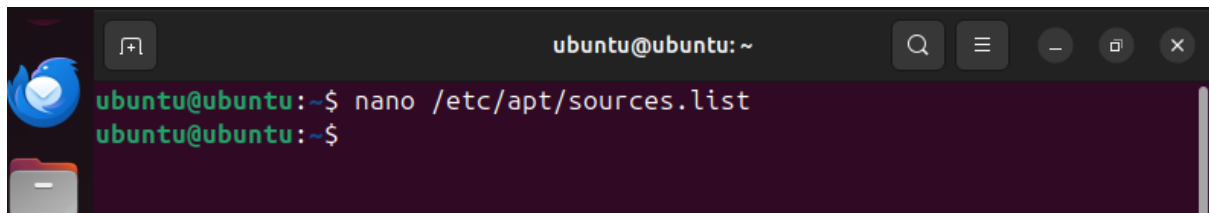
To decide what to add we need to know the codename for the ubuntu. For which we can use the command: `lsb_release -c`

```
ubuntu@ubuntu:~$ lsb_release -c
No LSB modules are available.
Codename:     noble
ubuntu@ubuntu:~$
```

Clearly the code name is 'noble'. Now, we can configure it further to make things happened smoothly.

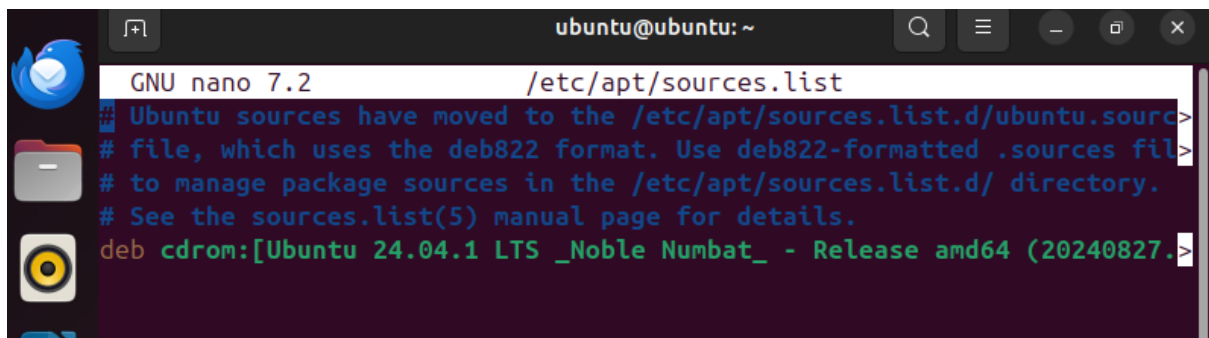
Sample /etc/apt/sources.list With Security Patching:

Open the sources.list using the “nano” command:



```
ubuntu@ubuntu: ~  
ubuntu@ubuntu:~$ nano /etc/apt/sources.list  
ubuntu@ubuntu:~$
```

Following screen will appear:



```
GNU nano 7.2 /etc/apt/sources.list  
# Ubuntu sources have moved to the /etc/apt/sources.list.d/ubuntu.sources  
# file, which uses the deb822 format. Use deb822-formatted .sources files  
# to manage package sources in the /etc/apt/sources.list.d/ directory.  
# See the sources.list(5) manual page for details.  
deb cdrom:[Ubuntu 24.04.1 LTS _Noble Numbat_ - Release amd64 (20240827.)
```

Paste the text as shown below: then save the buffer and exit.

Main Ubuntu repository

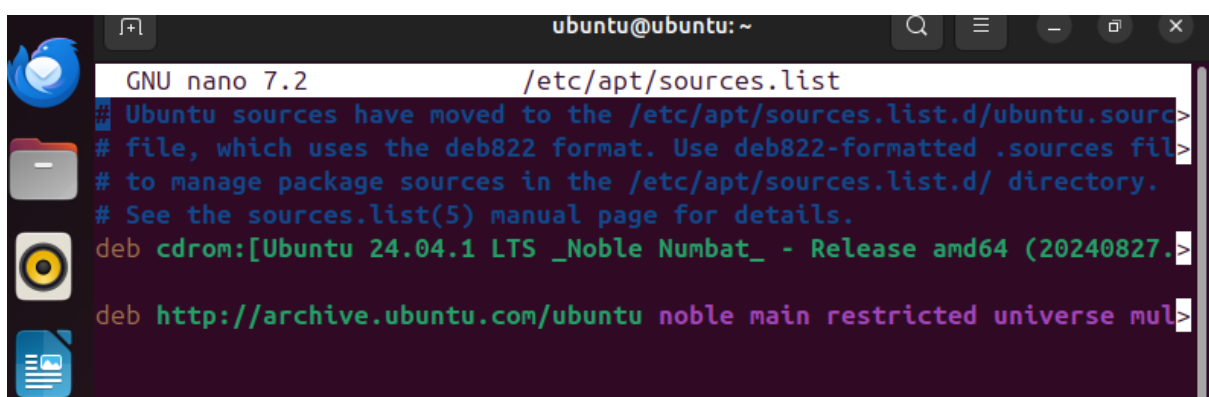
deb http://archive.ubuntu.com/ubuntu noble main restricted universe multiverse

Updates (non-security)

deb http://archive.ubuntu.com/ubuntu noble-updates main restricted universe multiverse

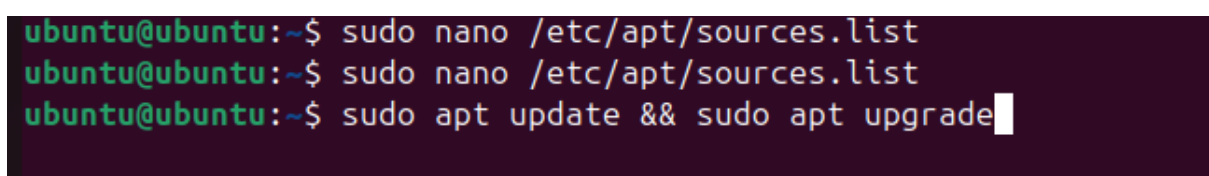
Security updates

deb http://security.ubuntu.com/ubuntu noble-security main restricted universe multiverse



```
GNU nano 7.2 /etc/apt/sources.list  
# Ubuntu sources have moved to the /etc/apt/sources.list.d/ubuntu.sources  
# file, which uses the deb822 format. Use deb822-formatted .sources files  
# to manage package sources in the /etc/apt/sources.list.d/ directory.  
# See the sources.list(5) manual page for details.  
deb cdrom:[Ubuntu 24.04.1 LTS _Noble Numbat_ - Release amd64 (20240827.)  
deb http://archive.ubuntu.com/ubuntu noble main restricted universe mul
```

Then update and apply the patches:



```
ubuntu@ubuntu:~$ sudo nano /etc/apt/sources.list  
ubuntu@ubuntu:~$ sudo nano /etc/apt/sources.list  
ubuntu@ubuntu:~$ sudo apt update && sudo apt upgrade
```

What we changed above?

Before editing the `/etc/apt/sources.list`, your system was getting general updates but not guaranteed security patches. By adding the noble-security entries, you enabled a dedicated security channel that delivers faster and targeted fixes for vulnerabilities. This ensures your system stays protected from known threats and follows proper cybersecurity hardening practices.

--The End--