

Linux

What is Linux?

Linux is an operating system — just like Windows and macOS.

But the special thing is:

Linux is free, open-source, powerful, and used everywhere in cybersecurity.

Think of it as the favorite OS of hackers, security professionals, programmers, and servers.

Why is Linux so famous?

1. It's Free & Open Source

Anyone can download, use, modify, or improve it.

That's why hackers love it — you fully control the system.

2. It's Super Secure

Linux is built with strong permissions and strict security.

That's why:

- 90% of servers run on Linux
 - All cybersecurity tools work best on Linux
 - Most hacking labs use Linux machines like Kali, Parrot OS, Ubuntu
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3. It's Fast and Lightweight

It runs smoothly even on old laptops.

4. It Uses Terminal

This gives you full power.

You can control everything using commands — which is super important in cybersecurity.

5. Most Tools Run Only on Linux

Important cybersecurity tools like:

- Nmap
- Metasploit
- Burp Suite

- Wireshark
- Hydra
- John the Ripper
- Aircrack-ng
- Nikto
- Gobuster

...all work best on Linux.

Where is Linux used?

Everywhere you depend on daily:

- Android phones → based on Linux
- Servers → run Linux
- Supercomputers → almost all run Linux
- Hacking labs → Linux
- Cloud (AWS, Azure, GCP) → Linux servers
- Routers → use Linux internally

Linux is literally the backbone of the internet.