Network Terminology - Simple Table

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| Term | Simple Explanation |
| Network | 2+ computers connected to share data |
| LAN | Local network in one place (home/office) (Full form: Local Area Network) |
| WAN | Large network covering big areas (internet) (Full form: Wide Area Network) |
| WLAN | Wireless LAN using Wi-Fi (Full form: Wireless Local Area Network) |
| VPN | Private, secure tunnel on the internet (Full form: Virtual Private Network) |
| PAN | Small personal network (e.g., Bluetooth) (Full form: Personal Area Network) |
| MAN | Network for a city or campus (Full form: Metropolitan Area Network) |
| SAN | Network for storage devices (Full form: Storage Area Network) |
| EPN | A company's private network (Full form: Enterprise Private Network) |
| CAN | Network in a campus or university (Full form: Campus Area Network) |
| POLAN | LAN using fiber optics (Full form: Passive Optical Local Area Network) |
| Hub | Basic connector that sends data to all devices |
| Switch | Smarter hub, sends data to right device only |
| Router | Connects different networks (like home Wi-Fi) |
| Firewall | Blocks bad traffic, protects network |
| Server | Powerful computer that stores & shares data |
| Endpoint | Any device people use (phone, laptop) |
| Access Point | Device to connect Wi-Fi devices |
| Repeater | Boosts network signal |
| Bridge | Connects two networks |
| Gateway | Connects networks with different rules |
| Modem | Connects you to internet provider |
| Packet | Small piece of data sent over network |
| Port | "Door" used to send/receive data |
| Protocol | Rules for sending/receiving data |
| Ethernet | Wired network connection |
| Wi-Fi | Wireless network connection |
| IP Address | Unique number for each device |
| MAC Address | Unique hardware number for network card |
| OSI Model | 7-layer model explaining data flow |
| TCP/IP Model | 4-layer model used on internet |
| IPv4 | Older IP address system (Full form: Internet Protocol version 4) |
| IPv6 | Newer IP address system, supports more devices (Full form: Internet Protocol version 6) |
| DoS/DDoS | Attack to overload a server |
| Fragment Attack | Breaks data into confusing pieces |
| Oversized Packet Attack | Sends too-large data to crash system |
| Spoofing | Fakes identity to trick systems |
| Man-in-the-Middle | Intercepts data between people |
| Virus/Worm/Trojan | Malicious software to harm devices |
| Phishing | Tricking people to steal info |
| Rootkit | Hidden malware controlling a computer |
| Side-Channel Attack | Steals secrets by observing system behavior |
| SQL Injection/XSS | Exploits websites to steal/change data |
| Privilege Escalation | Getting more access than allowed |
| Insider Threat | Insider misusing access |
| IDS/NIDS/HIDS | Tools to detect attacks |
| SIEM | Checks & collects security data |
| IPS/NIPS/HIPS | Tools to block attacks |
| Antivirus | Finds & removes viruses |
| Scans | Looks for weaknesses |
| SaaS | Use ready apps online (Full form: Software as a Service) |
| IaaS | Rent servers/storage online (Full form: Infrastructure as a Service) |
| PaaS | Build apps online (Full form: Platform as a Service) |
| Public Cloud | Cloud for anyone to use |
| Private Cloud | Cloud for one company |
| Community Cloud | Cloud for groups with same needs |
| Hybrid Cloud | Mix of public & private cloud |
| Network Segmentation | Breaking network into parts |
| Microsegmentation | Tiny parts for tight security |
| DMZ | Small open part separated from main network (Full form: Demilitarized Zone) |
| VLAN | Virtual LAN inside physical network (Full form: Virtual Local Area Network) |
| Zero Trust | Never trust by default, always check |
| Defense in Depth | Multiple security layers |
| Network Access Control | Controls who can connect |
| Encapsulation | Wrapping data in packets |
| De-Encapsulation | Unwrapping data |
| API | Software talking to other software (Full form: Application Programming Interface) |
| Zenmap | GUI for network scanner Nmap |
| PCI DSS | Rules for safe card payments (Full form: Payment Card Industry Data Security Standard) |
| Payload | The harmful part of malware |
| ICMP | Checks if a device is reachable (Full form: Internet Control Message Protocol) |
| FTP | Transfers files (Full form: File Transfer Protocol) |
| SMTP | Sends emails (Full form: Simple Mail Transfer Protocol) |
| DNS | Turns website names to IP addresses (Full form: Domain Name System) |
| Bit | Single 0 or 1 |
| Byte | 8 bits |
| Hardware | Physical computer parts |
| Software | Programs on hardware |