



# Common Ports & Protocols

The well-known TCP/UDP ports every IT and security pro should know, grouped by service. A filled dot marks protocols that are encrypted by default.



Scan to drill  
this sheet

## Secure vs insecure pairs Exam favourites — know both halves of every pair.

|                  |                  |                |                  |                  |                  |                  |
|------------------|------------------|----------------|------------------|------------------|------------------|------------------|
| <b>Telnet</b> 23 | <b>HTTP</b> 80   | <b>FTP</b> 21  | <b>LDAP</b> 389  | <b>IMAP</b> 143  | <b>POP3</b> 110  | <b>SMTP</b> 25   |
| <b>SSH</b> 22    | <b>HTTPS</b> 443 | <b>SFTP</b> 22 | <b>LDAPS</b> 636 | <b>IMAPS</b> 993 | <b>POP3S</b> 995 | <b>SMTPS</b> 465 |

## WEB

|      |     |             |                         |
|------|-----|-------------|-------------------------|
| 80   | TCP | HTTP        | Unencrypted web traffic |
| 443  | TCP | HTTPS •     | Encrypted web (TLS)     |
| 8080 | TCP | HTTP alt    | Proxies, dev servers    |
| 8443 | TCP | HTTPS alt • | Admin consoles          |

## EMAIL

|     |     |             |                         |
|-----|-----|-------------|-------------------------|
| 25  | TCP | SMTP        | Server-to-server relay  |
| 587 | TCP | SMTP submit | Client mail, STARTTLS   |
| 465 | TCP | SMTPS •     | Implicit TLS submission |
| 110 | TCP | POP3        | Retrieve mail (legacy)  |
| 995 | TCP | POP3S •     | POP3 over TLS           |
| 143 | TCP | IMAP        | Sync mail, cleartext    |
| 993 | TCP | IMAPS •     | IMAP over TLS           |

## FILE TRANSFER & SHARING

|      |         |                 |                          |
|------|---------|-----------------|--------------------------|
| 20   | TCP     | FTP data        | File-transfer channel    |
| 21   | TCP     | FTP control     | Commands — cleartext     |
| 69   | UDP     | TFTP            | Trivial FTP — no auth    |
| 139  | TCP     | NetBIOS Session | Legacy Windows shares    |
| 445  | TCP     | SMB             | Windows file sharing     |
| 2049 | TCP/UDP | NFS             | Unix network file system |
| 9418 | TCP     | Git             | Git protocol — no auth   |

## REMOTE ACCESS

|      |         |        |                          |
|------|---------|--------|--------------------------|
| 22   | TCP     | SSH •  | Shell, tunnels, SFTP     |
| 23   | TCP     | Telnet | Legacy shell — cleartext |
| 135  | TCP/UDP | MS RPC | Windows endpoint mapper  |
| 3389 | TCP/UDP | RDP •  | Windows Remote Desktop   |
| 5900 | TCP     | VNC    | Cross-platform desktop   |

## NAME, DIRECTORY & AUTH

|      |         |            |                              |
|------|---------|------------|------------------------------|
| 53   | TCP/UDP | DNS        | Name resolution (TCP = AXFR) |
| 43   | TCP     | WHOIS      | Registration lookups         |
| 389  | TCP/UDP | LDAP       | Directory queries, plain     |
| 636  | TCP     | LDAPS •    | LDAP over TLS                |
| 49   | TCP     | TACACS+ •  | Cisco device AAA             |
| 88   | TCP/UDP | Kerberos • | AD authentication tickets    |
| 1812 | UDP     | RADIUS     | AAA (1813 = accounting)      |

## CORE NETWORK SERVICES

|      |     |               |                      |
|------|-----|---------------|----------------------|
| 67   | UDP | DHCP server   | Hands out IP leases  |
| 68   | UDP | DHCP client   | Receives IP leases   |
| 123  | UDP | NTP           | Time synchronization |
| 137  | UDP | NetBIOS Name  | Legacy name service  |
| 138  | UDP | NetBIOS Dgram | Legacy datagrams     |
| 161  | UDP | SNMP          | Device polling       |
| 162  | UDP | SNMP Trap     | Async device alerts  |
| 514  | UDP | Syslog        | Centralized logging  |
| 179  | TCP | BGP           | Routing between AS   |
| 9100 | TCP | JetDirect     | Raw network printing |

## DATABASES

|       |         |               |                     |
|-------|---------|---------------|---------------------|
| 1433  | TCP     | MS SQL Server | Microsoft SQL       |
| 1521  | TCP     | Oracle        | Database listener   |
| 3306  | TCP     | MySQL         | MySQL / MariaDB     |
| 5432  | TCP     | PostgreSQL    | PostgreSQL          |
| 6379  | TCP     | Redis         | In-memory key-value |
| 27017 | TCP     | MongoDB       | NoSQL documents     |
| 11211 | TCP/UDP | Memcached     | Distributed cache   |

## VPN & TUNNELING

|       |         |               |                       |
|-------|---------|---------------|-----------------------|
| 500   | UDP     | IKE / IPsec • | Key exchange (ISAKMP) |
| 4500  | UDP     | IPsec NAT-T • | IPsec through NAT     |
| 1194  | TCP/UDP | OpenVPN •     | OpenVPN default       |
| 1701  | UDP     | L2TP          | Paired with IPsec     |
| 1723  | TCP     | PPTP          | Legacy VPN — insecure |
| 51820 | UDP     | WireGuard •   | Modern, fast VPN      |

## MESSAGING, MEDIA & OTHER

|      |         |            |                            |
|------|---------|------------|----------------------------|
| 502  | TCP     | Modbus     | ICS / SCADA control        |
| 554  | TCP/UDP | RTSP       | Streaming media control    |
| 1883 | TCP     | MQTT       | IoT pub/sub messaging      |
| 4444 | TCP     | Metasploit | Reverse shell / C2 default |
| 5060 | TCP/UDP | SIP        | VoIP call signaling        |
| 6667 | TCP     | IRC        | Internet Relay Chat        |
| 9092 | TCP     | Kafka      | Event-streaming broker     |

Reading a list won't stick — turn it into instinct.

Drill these ports in Port Scan and Port Recall. Ten minutes a day, free forever, no card.

[cyberquizzer.com/go/ports-sheet](https://cyberquizzer.com/go/ports-sheet)