

Types of Servers Cheat Sheet

Web Server



Function: Hosts websites and serves web pages to clients (browsers).

Examples: Apache HTTP Server, Nginx, Microsoft IIS.

Protocols: HTTP, HTTPS.

Application Server



Function: Hosts & runs applications, providing business logic to client applications.

Examples: Apache Tomcat, JBoss, WebLogic.

Protocols: HTTP, HTTPS, RMI (Remote Method Invocation).

Database Server



Function: Provides database services to other computers /applications.

Examples: MySQL, PostgreSQL, Microsoft SQL Server, Oracle Database.

Protocols: SQL, TDS

File Server



Function: Stores and manages files for network users, providing shared access.

Examples: Windows Server, Samba, NetApp.

Protocols: SMB, NFS, AFP.

Mail Server



Function: Sends, receives, and stores email for clients.

Examples: Microsoft Exchange, Postfix, Sendmail.

Protocols: SMTP, IMAP, POP3 (Post Office Protocol 3).

Proxy Server



Function: Acts as an intermediary for requests between clients & servers, improving security & performance.

Examples: Squid, HAProxy, Nginx (configured as a reverse proxy).

Protocols: HTTP, HTTPS, FTP.

DNS Server



Function: Translates domain names into IP addresses.

Examples: BIND (Berkeley Internet Name Domain), Microsoft DNS, Cloudflare DNS.

Protocols: DNS

FTP Server



Function: Facilitates the transfer of files using the File Transfer Protocol.

Examples: vsftpd, ProFTPD, FileZilla Server.

Protocols: FTP, FTPS

Virtualization Server



Function: Hosts virtual machines & manages virtual environments.

Examples: VMware ESXi, Microsoft Hyper-V, KVM

Protocols: Various, including VM-specific management protocols.

Game Server



Function: Hosts multiplayer game sessions & manages game data.

Examples: Minecraft Server, Steam Dedicated Server, Unreal Engine Server.

Protocols: Game-specific protocols (e.g., TCP/UDP).

Chat Server



Function: Facilitates real-time communication between users.

Examples: IRC servers, Slack, Discord.

Protocols: XMPP (Extensible Messaging and Presence Protocol), IRC.

Media Server



Function: Streams audio and video content to clients.

Examples: Plex, Emby, Jellyfin.

Protocols: HTTP, RTSP, DLNA (Digital Living Network Alliance).

Monitoring Server



Function: Track network performance, detect failures

Examples: Nagios, Zabbix, PRTG Network Monitor, Cisco DNA Center

Protocols: SNMP, ICMP, NetFlow / sFlow / IPFIX, Syslog, HTTP/S & REST APIs, SSH

Print Server



Function: Manages and distributes print jobs within a network.

Examples: CUPS (Common UNIX Printing System), Windows Print Server.

Protocols: IPP (Internet Printing Protocol), LPD/LPR

Authentication Server



Function: Manages user authentication and authorization.

Examples: Microsoft Active Directory, OpenLDAP, RADIUS server.

Protocols: LDAP, RADIUS

