

Types of Servers

A **server** is a computer program or a device that provides functionality for other programs or devices, called "clients". This architecture is called the client–server model, and a single overall computation is distributed across multiple processes or devices. Servers can provide various functionalities, often called "services", such as sharing data or resources among multiple clients, or performing computation for a client. A single server can serve multiple clients, and a single client can use multiple servers. A client process may run on the same device or may connect over a network to a server on a different device. Typical servers are database servers, file servers, mail servers, print servers, web servers, game servers, and application servers.

Client–server systems are today most frequently implemented by (and often identified with) the request–response model: a client sends a request to the server, which performs some action and sends a response back to the client, typically with a result or acknowledgment. Designating a computer as "server-class hardware" implies that it is specialized for running servers on it. This often implies that it is more powerful and reliable than standard personal computers, but alternatively, large computing clusters may be composed of many relatively simple, replaceable server components.



Server type

Application server:

Hosts web apps (computer programs that run inside a web browser) allowing users in the network to run and use them, without having to install a copy on their own computers. Unlike what the name might imply, these servers need not be part of the World Wide Web; any local network would do. Computers with a web browser

Catalog server:

Maintains an index or table of contents of information that can be found across a large distributed network, such as computers, users, files shared on file servers, and web apps. Directory servers and name servers are examples of catalog servers. Any computer program that needs to find something on the network, such a Domain member attempting to log in, an email client looking for an email address, or a user looking for a file

Communications server:

Maintains an environment needed for one communication endpoint (user or devices) to find other endpoints and communicate with them. It may or may not include a directory of communication endpoints and a presence detection service, depending on the openness and security parameters of the network
Communication endpoints (users or devices)

Computing server:

Shares vast amounts of computing resources, especially CPU and random-access memory, over a network. Any computer program that needs more CPU power and RAM than a personal computer can probably afford. The client must be a networked computer; otherwise, there would be no client-server model.

Database server:

Maintains and shares any form of database (organized collections of data with predefined properties that may be displayed in a table) over a network. Spreadsheets, accounting software, asset management software or virtually any computer program that consumes well-organized data, especially in large volumes

Fax server:

Shares one or more fax machines over a network, thus eliminating the hassle of physical access Any fax sender or recipient

File server:

Shares files and folders, storage space to hold files and folders, or both, over a network Networked computers are the intended clients, even though local programs can be clients

Game server:

Enables several computers or gaming devices to play multiplayer video games Personal computers or gaming consoles

Mail server:

Makes email communication possible in the same way that a post office makes snail mail communication possible Senders and recipients of email

Media server:

Shares digital video or digital audio over a network through media streaming (transmitting content in a way that portions received can be watched or listened to as they arrive, as opposed to downloading an entire file and then using it) User-attended personal computers equipped with a monitor and a speaker

Print server:

Shares one or more printers over a network, thus eliminating the hassle of physical access Computers in need of printing something

Sound server:

Enables computer programs to play and record sound, individually or cooperatively Computer programs of the same computer and network clients.

Proxy server:

Acts as an intermediary between a client and a server, accepting incoming traffic from the client and sending it to the server. Reasons for doing so include content control and filtering, improving traffic performance, preventing unauthorized network access or simply routing the traffic over a large and complex network. Any networked computer

Virtual server:

Shares hardware and software resources with other virtual servers. It exists only as defined within specialized software called hypervisor. The hypervisor presents virtual hardware to the server as if it were real physical hardware. Server virtualization allows for a more efficient infrastructure. Any networked computer

Web server:

Hosts web pages. A web server is what makes the World Wide Web possible. Each website has one or more web servers. Computers with a web browser

Telnet Server:

It enables the users to log on to a host computer and execute tasks as if they are working on a remote computer.

Chat Server:

It serves the users to exchange data in an environment similar to Internet newsgroup which provides real-time discussion capabilities.

FTP Server:

It works on one of the oldest of the Internet services, the file transfer protocol. It provides a secure file transfer between computers while ensuring file security and transfer control.

Groupware Server:

It is a software designed that enables the users to work together, irrespective of the location, through the Internet or a corporate intranet and to function together in a virtual atmosphere.

List Server:

It provides a better way of managing mailing lists. The server can be either open interactive discussion for the people or a one-way list that provides announcements, newsletters or advertising.

News Server:

It serves as a distribution and delivery source for many public news groups, approachable over the USENET news network.