

Network Servers

What is a Network Server?

A network server is a computer designed to act as central repository and help in providing various resources like hardware access, disk space, printer access etc., to other computers in the network.

A network server might not differ from a workstation in hardware, but the functionality it performs clearly differentiates it from other workstations. Network servers helps in simplifying the different tasks for system administrators.

Any configuration or security updates can be applied to a network server instead of individually passing to different computers connected to the network.

Types of Network Servers:

File servers

File servers store and distribute files. Multiple clients or users may share files stored on a server. In addition, centrally storing files offers easier backup or fault tolerance solutions than attempting to provide security and integrity for files on every device in an organization. File server hardware can be designed to maximize read and write speeds to improve performance.

Print servers

Print servers allow for the management and distribution of printing functionality. Rather than attaching a printer to every workstation, a single print server can respond to printing requests from numerous clients. Today, some larger and higher-end printers come with their own built-in print server, which removes the need for an additional computer-based print server. This internal print server also functions by responding to print requests from a client.

Application servers

Application servers run applications in lieu of client computers running applications locally. Application servers often run resource-intensive applications that are shared by a large number of users. Doing so removes the need for each client to have sufficient resources to run the applications. It also removes the need to install and maintain software on many machines as opposed to only one.

Mail servers

Mail servers are a very common type of application server. Mail servers receive emails sent to a user and store them until requested by a client on behalf of said user. Having an email server allows for a single machine to be properly configured and attached to the network at all times. It is then ready to send and receive messages rather than requiring every client machine to have its own email subsystem continuously running.

Web servers

One of the most abundant types of servers in today's market is a web server. A web server is a special kind of application server that hosts programs and data requested by users across the Internet or an intranet. Web servers respond to requests from browsers running on client computers for web pages, or other web-based services. Common web servers include Apache web servers, Microsoft Internet Information Services (IIS) servers and Nginx servers.

Proxy servers

A proxy server acts as an intermediary between a client and a server. Often used to isolate either the clients or servers for security purposes, a proxy server takes the request from the client. Instead of responding to the client, it passes the request on to another server or process. The proxy server receives the response from the second server and then replies to the original client as if it were replying on its own. In this way, neither the client nor the responding server needs to directly connect to each other.