NETWORK CONFIGURATION HARDWARE

Network configuration is the process of setting a network's controls, flow, and operation to support the network communication of an organization and/or network owner. This broad term incorporates multiple configuration and setup processes on network hardware, software, and other supporting devices and components.

Node

Any system or device connected to a network is also called a node. For example, if a network connects a file server, five computers, and two printers, there are eight nodes on the network. Each device on the network has a network address, such as a MAC address, which uniquely identifies each device. This helps keep track of where data is being transferred to and from on the network.

A node can also refer to a leaf, which is a folder or file on your hard disk. In physics, a node, or nodal point, is a point of minimum displacement or where multiple waves converge, creating a net amplitude of zero.

In communication networks, a node is an active electronic device that is attached to a network and is capable of sending, receiving, or forwarding information over a communications channel.

Server

- A computer or application, that provides a service to client software on other computers. Servers are used for web hosting and other web applications
- A high-end computer with specific software that allows other computers to use its facilities for connection to data drives, email, printers, the Internet, or other services.
- A computer or device on a network that manages network resources. For example, a file server is a computer and storage device dedicated to storing files. Any user on the network can store files on the server.

A server is a computer program or device that provides a service to another computer program and its user, also known as the client. In a data center, the physical computer that a server program runs on is also frequently referred to as a server. That machine may be a dedicated server or it may be used for other purposes as well. In the client/server programming model, a server program awaits and fulfils requests from client programs, which may be running in the same or other computers. A given application in a computer may function as a client with requests for services from other programs and also as a server of requests from other programs.

Types of servers

Servers are often categorized in terms of their purpose. A few examples of the types of servers available are:

- A Web server is a computer program that serves requested HTML pages or files. In this case, a Web browser acts as the client.
- An application server is a program in a computer in a distributed network that provides the business logic for an application program.
- A proxy server is a software that acts as an intermediary between an endpoint device, such as a computer, and another server from which a user or client is requesting a service.
- A mail server is an application that receives incoming e-mails from local users (people within the same domain) and remote senders and forwards outgoing e-mails for delivery.
- A virtual server is a program running on a shared server that is configured in such a way that it seems to each user that they have complete control of a server.
- A blade server is a server chassis housing multiple thin, modular electronic circuit boards, known as server blades. Each blade is a server in its own right, often dedicated to a single application.
- A file server is a computer responsible for the central storage and management of data files so that other computers on the same network can access them.
- A policy server is a security component of a policy-based network that provides authorization services and facilitates tracking and control of files.