



What is a Network Operating System?



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The basic definition of an [operating system](#) is that the operating system is the interface between the computer hardware and the user. In daily life, we use the operating system on our devices which provides a good GUI, and many more features. Similarly, a network operating system(NOS) is software that connects multiple devices and computers on the network and allows them to share resources on the network. Let's see what are the functions of the network operating system.

Functions of the NOS (Network Operating System)

The following are the main functions of NOS:

- Creating and managing user accounts on the network.
- Controlling access to resources on the network.
- Provide communication services between the devices on the network.
- Monitor and troubleshoot the network.
- Configuring and Managing the resources on the network.

Now let's see the type of Network Operating systems.

Types of Network Operating Systems

There are mainly two types of networks, one is peer-to-peer and another is client/server. Now let's see each type one by one.

- **Peer to Peer:** Peer-to-peer network operating systems allow the sharing of resources and files with small-sized networks and having fewer resources. In general, peer-to-peer network operating systems are used on LAN.
- **Client/server:** Client-server network operating systems provide users access to resources through the central server. This NOS is too expensive to implement and maintain. This operating system is good for the big networks which provide many services.

Features of Network Operating Systems

Let's see what are the functions of the network operating system.

- Printers and application sharing on the network.
- File systems and database sharing.
- Provide good security by using functionality like user authentication and access control.
- Create backups of data.
- Inter-networking.

Now let's see what are the advantages of NOS.

Advantages of Network Operating Systems

- Highly stable due to central server.
- Provide good security.
- Upgradation of new technology and hardware can be easily implemented in the network.
- Provide remote access to servers from different locations.

Disadvantages of Network Operating Systems

- Depend on the central location to perform the operations.
- High cost to buying server.
- Regular updating and maintenance are required.

Now let's see what are the examples of network operating systems.

Examples of Network Operating Systems

Following are the examples of network operating systems.

- Microsoft Windows Server
- UNIX/Linux
- Artisoft's LANtastic
- Banyan's VINES

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