U2LO57

Network Operating System Features

Roll Call

Recap

Brain Teasers

1.

1

2.

2

3.

3

Brain Teasers

4.

4

5.

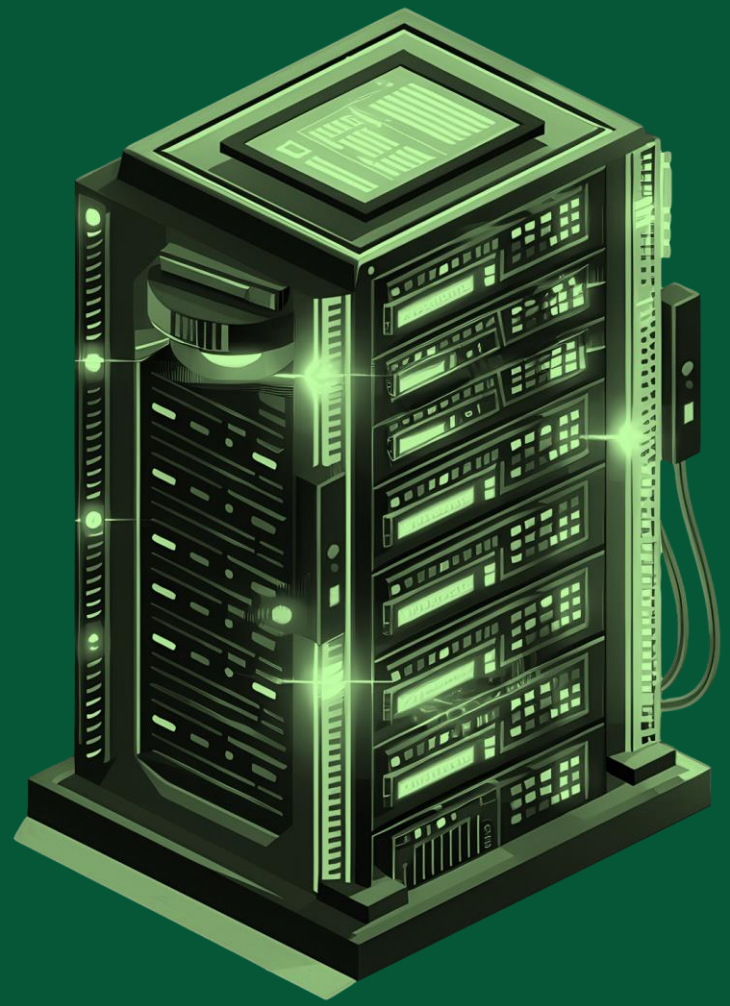
5

6.

6

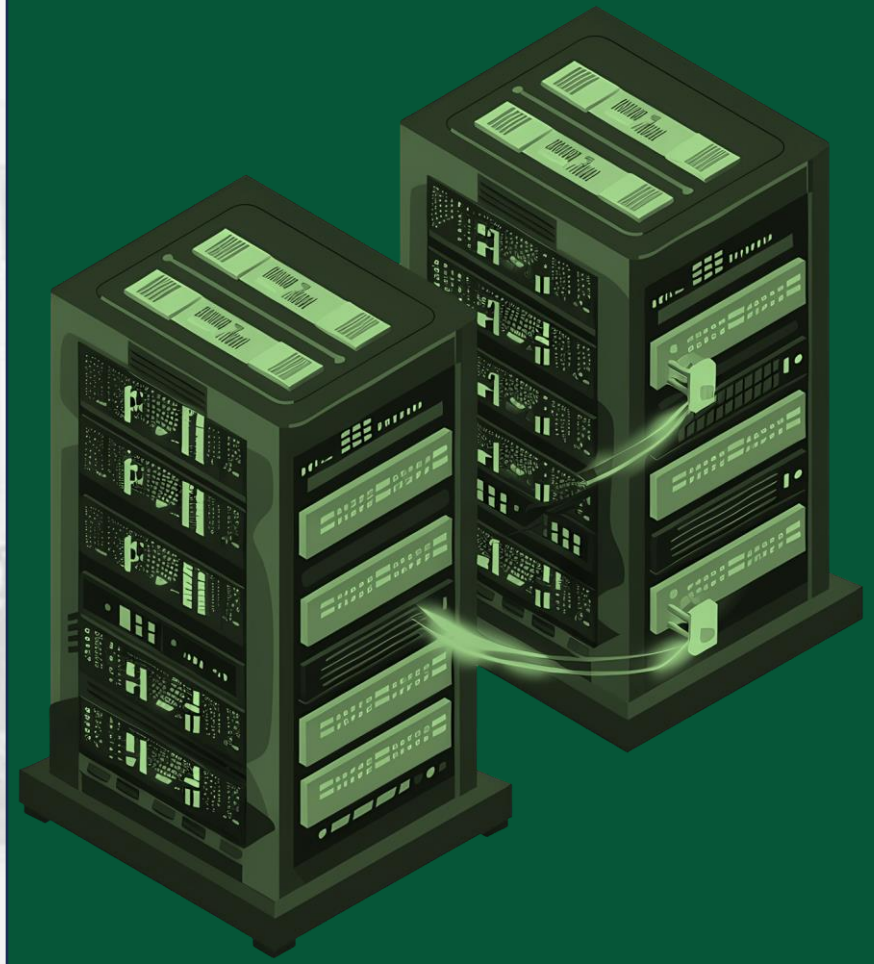
Network Operating System Features

Network operating systems (NOS) are computer operating systems designed primarily to serve workstations, personal computers, and, on occasion, older terminals connected to a local area network (LAN).

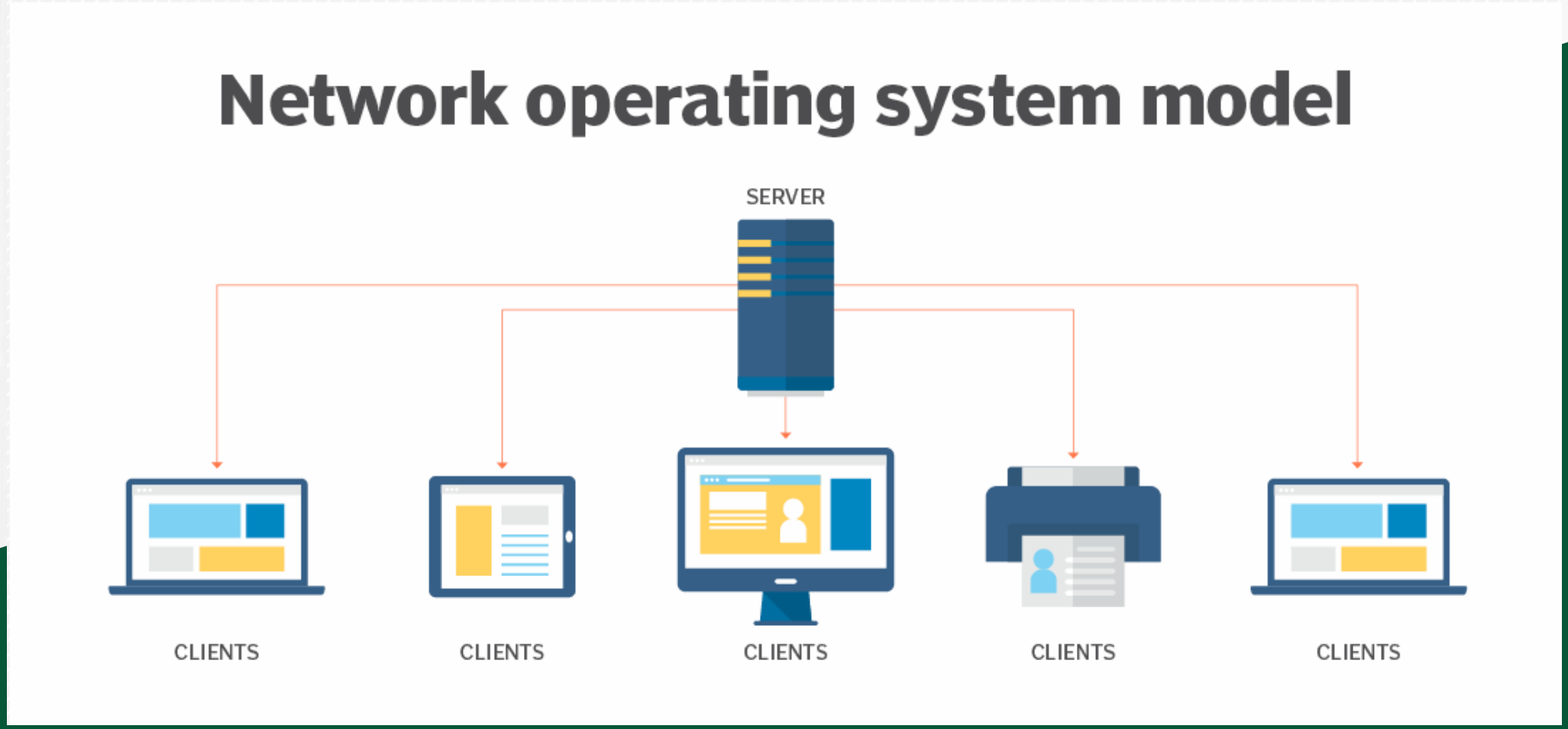


Network Operating System Features

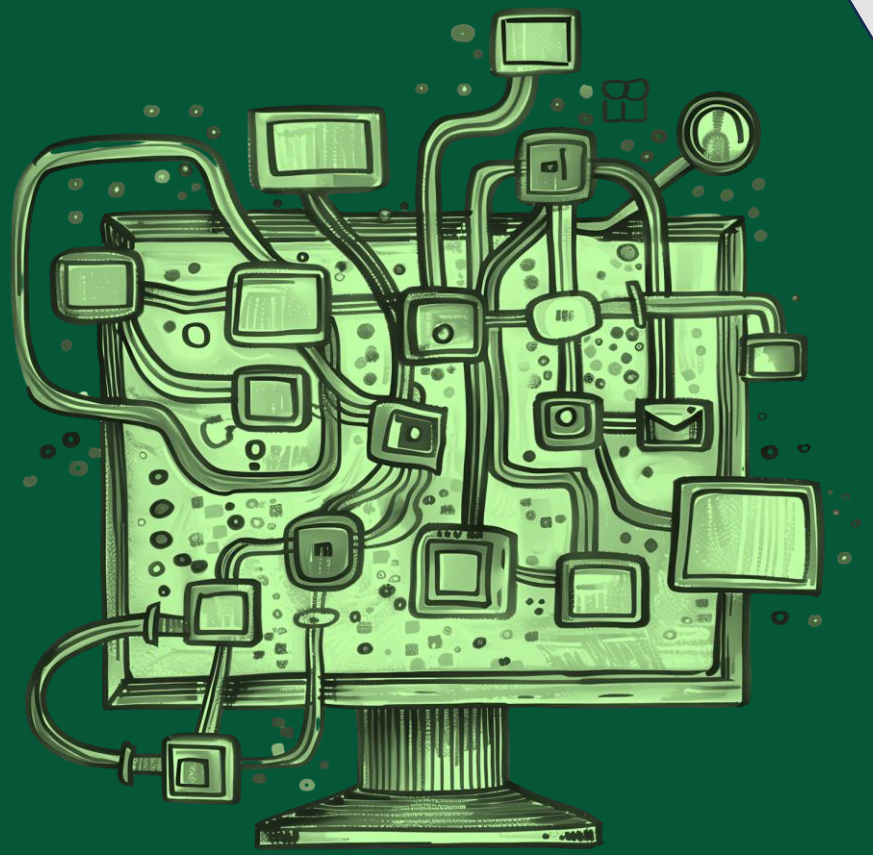
The software that runs a NOS allows several devices in a network to connect and share resources. However, the classic NOS is no longer relevant because the majority of operating systems have built-in network stacks that support the client-server paradigm.



Network Operating System Features



Network Operating System Features



A NOS organizes the actions of several computers connected to a network. This can include local network-connected devices like PCs, printers, file servers, and databases. In a multiuser context, the NOS's job is to supply fundamental network functions and services that enable numerous input requests at once.

Types of Network Operating Systems

Peer to Peer P2P

P2P network OSes let users share network resources saved in a common, accessible location. In this architecture, all devices are treated equally in terms of functionality. P2P usually works best for small and medium LANs and is less expensive to set up compared to the client-server model.

Client Server

Client-server network OSes provide users with access to resources through a server. In this architecture, all functions and applications are unified under one file server that can be used to execute individual client actions, regardless of physical location.

Client Server

Client-server tends to be more expensive than P2P to set up and requires significant technical maintenance. An advantage of the client-server model is that the network is controlled centrally, which makes changes or additions to technology easier to incorporate.

Common Features of Network Operating Systems

Basic support for OSes, including protocol and processor support, hardware detection and multiprocessing.

TLE_IACSS9-12ICCS-Ia-e-35

Printer and application sharing.

Common file system and database sharing.

Network security capabilities, such as user authentication and access control.

Directory services.

Backup and web services.

Internetworking.

Additional Information

Additional Information

1. What is Network Operating System?
2. What is the main role of the Network Operating System in a network?

Additional Information

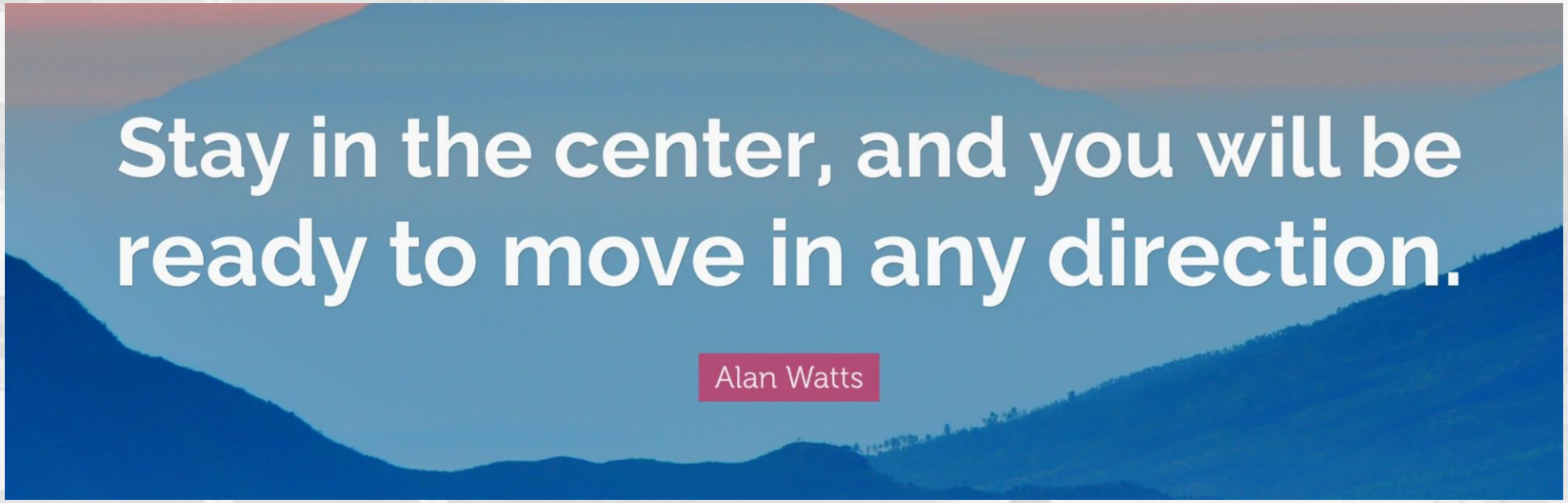
Do the following for 1 hour.

1. Write at least 5 features of NOS.
2. Write at least 5 importance of NOS in a network.

Additional Information

1. Is NOS required in a network where nodes should be managed and secured? why>?
2. What will happen whenever a NOS removed in network? Explain.

Foreword



You are now ready to move in the next lesson.