ASSIGNMENT SERIES - 75

# PACKET SWITCHING

7376212AL117

PRESENTED BY


# HARIVARSAN . R . J

DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING


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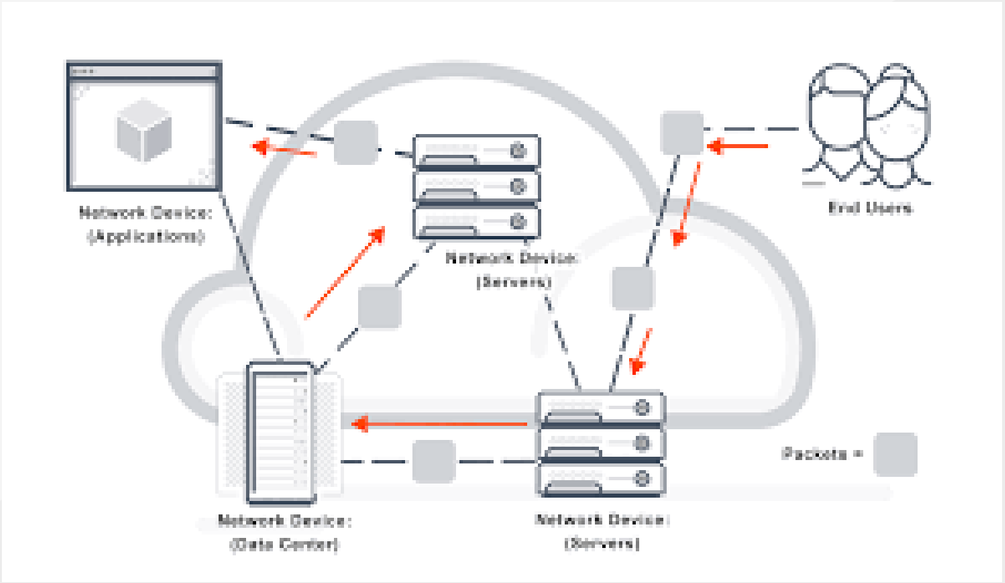
# WHAT IS PACKET SWITCHING ?

# PACKET SWITCHING

A channel for data transfer that uses packets as addresses is known as packet switching.




Packet-Switched networks were designed to overcome the weaknesses of Circuit-Switched networks

Packet Switching uses Store and Forward technique while switching the packets; while forwarding the packet each hop first stores that packet then forward.

# TYPES OF PACKET SWITCHING

There are two major types of packet switching

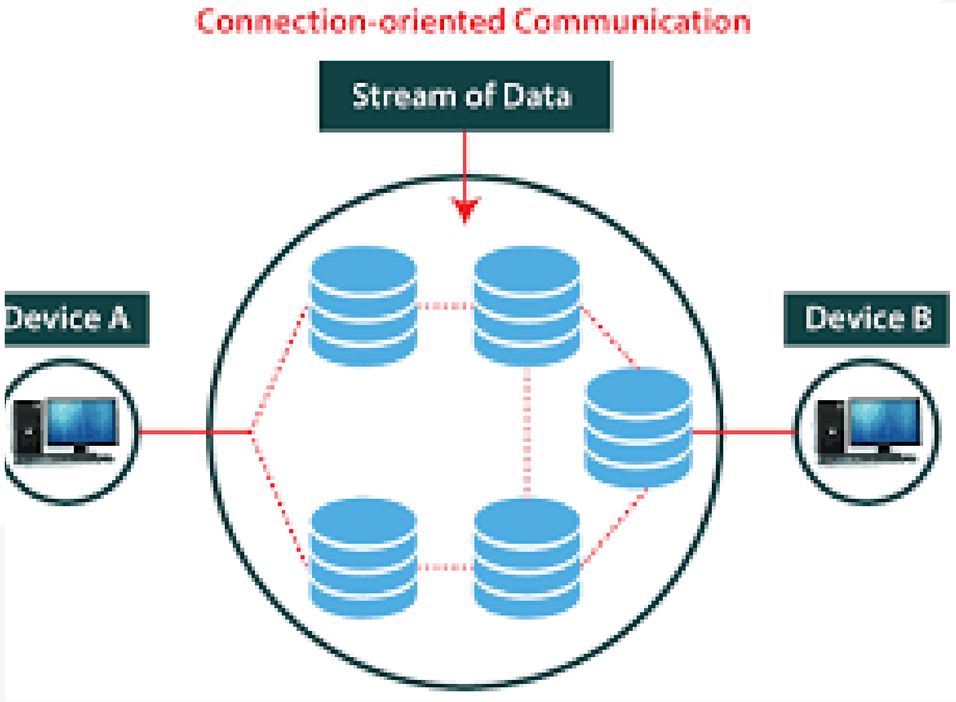
Connectionless Packet Switching

Connection-Oriented Packet Switching

# CONNECTION-ORIENTED PACKET SWITCHING

# *CONNECTION-ORIENTED PACKET SWITCHING*

A connection-oriented service is used to create an end to end connection between the sender and the receiver before transmitting the data over the same or different networks.




It involves the creation and deletion of the connection for sending the data between two or more devices.

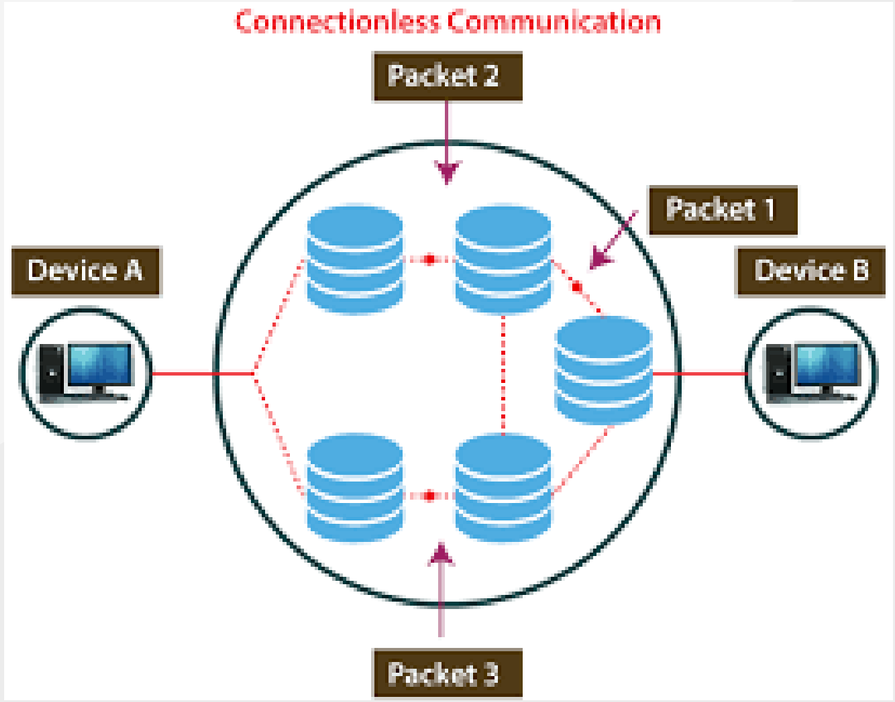
It is also known as a reliable network service.

It uses a handshake method that creates a connection between the user and sender for transmitting the data over the network.

# CONNECTIONLESS PACKET SWITCHING

# CONNECTIONLESS PACKET SWITCHING

Connectionless service is used in the network system to transfer data from one end to another end without creating any connection. So it does not require establishing a connection before sending the data from the sender to the receiver.




The data packet does not follow a defined path.

The transmitted data packet is not received by the receiver due to network congestion, and the data may be lost.

It is not a reliable network service because it does not guarantee the transfer of data packets to the receive

# PACKET SWITCHED NETWORKS

# PACKET SWITCHED NETWORKS

A packet-switched network (PSN) is a kind of computer communications network that sends data in the form of small packets.

It allows the sender to send data or network packets to the source and destination node over an internet network channel that is transferred between multiple users and/or applications.

A packet-switched is also called a connectionless network, as it does not create an endless connection between a source and destination points.

# IMPORTANCE AND ADVANTAGES

- The size of the packets determines the communication links, hence packet switching is crucial.
- As communication links are determined by the size of the packets, packet switching is important
- Communication is packetized and uses the same data transport for several users inside the same network.
- The system is more effective because there is no need to reserve the circuit even when it is not in use.
- Optimal transmission speed, minimal latency
- Data transmission that uses packet switching transmits digital data straight to its target.

# THANK YOU