

routing traffic by a setting up temporary connection between two or more network point. This is done by device that located at different location on the network called switch. Switched network some switches are directly connected to communicating device. Other is used for routing or forwarding information. Consider is scenario of small office having four telephone sets used by the four employees for communication. It direct ^{line} where to be used for all the place people. Six duplex lines are required this is called Point-to-Point Connection. Each switch is connected either to be communicating device or to many other switch for forwarding information. Multiple switches are used to complete the connection between any two communication or communicating device at a time.

Types of Switches:-

2) There are three types of switches -

1) Circuit Switch:-

⇒ When a device wants to communicate with another device circuit switching technique creates a fixed bandwidth channel

and circuit between the source and the destination. This circuit is reserved exclusively for a particular information flow and no other flow can use it. The path taken by data between the source and destination is determined by circuit on which it is follow and doesn't change during the life time of the connection. The circuit is determined by when the connection is closed. Therefore, this method is called circuit switching. A common example of a circuit switch network is public switch telephone network.

ii) Packet Switch:-

2) Packet Switching is introduced the idea of breaking data into packet which are discrete unit of potential variable length block of data. Part from data these packet also contain header with control information like the destination address. These packets are passed by the source point to its local packet switching or exchange the packet contains data and various

Control information. The packet switch network allow any host to send data to any other host without the circuit multiple path between a pair of sender and receiver may exist in a packet switching network.

iii) Message Switch:-

⇒ Message Switching technique is store and forward mechanism. In this mechanism a special device in the network receive the message from a communicating device and store it into its memory. Then it find a free route and send the stored information to the destination. In this kind of switching it is always delivered to one device where it is stored and rerouted to its destination. Message Switching is complete message is transmitted from device to device through the internetwork that is message is transmitted from the source node to intermediate node. The first electro mechanical telecommunication message switching is used for telegram. The message was punched on paper tape offline and the sending office and then read in

transmitted over a communication line to the next office along the way where it was punched out.

exa

E-mail

Topic:- ISDM

ISDM stand for Integrated Services-digital network is a set of communication standards for simultaneous digital transmission of voice, video, data and other network services over the traditional circuits. The Public Circuit Switch Telephone System was design for analog voice transmission and it is not applicable for modern communication need user demand for an end to end digital services. The primary goal of the integration of telephone voice and non-voice services are —

i) An interconnected billion of hier telephone that rings to where ^{hier} install

ii) A telephone with multiple buttons for instant cost set up to arbitrary telephone

anywhere in the world.

- iii) Telephone that display caller telephone number, name and address on a display while ringing.
- iv) It allow the telephone to be connected so that callers database record are display on the screen and the as the calls come in.
- v) Advance non-voice services are remote electricity meter reading online medical smoke alarm that automatically call their hospital, police, wired fire department respectively and give their add to speed of response.

ISDN is a network architecture in which digital technology is used to convey information from multiple networks to the end user. This information is end-to-end digital.