

NETWORKING AND INTERNETWORKING DEVICES

1. REPEATER

- A REPEATER IS AN ELECTRONICS DEVICE THAT RECEIVES A SIGNAL AND RETRANSMIT IT AT A HIGHER LEVEL OR HIGHER POWER. i.e. A REPEATER WORKS AS A SIGNAL AMPLIFIER.
- REPEATER IS A NETWORK DEVICE USED TO REGENERATE OR REPLICATE A SIGNAL.
- REPEATER REGENERATE ANALOG OR DIGITAL SIGNALS DISTORTED BY TRANSMISSION LOSS.
- REPEATER WORKS AT PHYSICAL LAYER OF OSI MODEL.
- ANALOG REPEATER ONLY AMPLIFY THE SIGNAL.
- DIGITAL REPEATERS CAN RECONSTRUCT A SIGNAL TO NEAR ITS ORIGINAL QUALITY.

2. HUB

- HUB IS A NETWORK DEVICE THAT CONNECT MULTIPLE ETHERNET DEVICES TOGETHER.
- HUB IS ALSO KNOWN AS *MULTIPORT REPEATER*.
- HUB WORKS AT PHYSICAL LAYER OF OSI MODEL.

TYPES

(I) ACTIVE HUBS:

A CENTRAL CONNECTING DEVICE IN A NETWORK THAT REGENERATES SIGNALS ON THE OUTPUT SIDE TO KEEP THE SIGNAL STRONG.

(II) PASSIVE HUBS:

A PASSIVE HUB SERVES SIMPLY AS A CONDUIT FOR THE DATA, ENABLING IT TO GO FROM ONE DEVICE TO ANOTHER. IT DOES NOT REGENERATES.

(III) INTELLIGENT HUBS:

- ENABLES AN ADMINISTRATOR TO MONITOR THE TRAFFIC PASSING THROUGH THE HUB.
- ENABLES AN ADMINISTRATOR TO CONFIGURE EACH PORT IN THE HUB.
- INTELLIGENT HUBS ARE ALSO CALLED MANAGEBLE HUBS.

USES

- HUBS REPEATS ALL THE INFORMATION IT RECEIVES AND FORWARD IT TO ALL PC TERMINALS ATTACHED TO IT.
- THIS REPETITION OF DATA RESULTS IN UN-NECESSARY DATA TRAFFIC BEING SENT TO THE NETWORK.