Local area network - LAN: Devices - Part III

Hub - Also called multiport repeater, it functions exactly like the repeater but has multiple ports to connect to other devices. The common hub has 4,8,12 and 4 ports and is the center of the star network. There are usually the following hub types

1.Card network - NIC Network Card - A NIC is a printed circuit board that is plugged into a computer to provide a connection to the network. The network card is considered to be an active device at layer 2 of the OSI model. Each network card contains a unique address that is the MAC address - Media Access Control. The network card controls the connection of the computer to the network media.

Picture 1 of Local area network - LAN: Devices - Part III

2. Repeater - Repeater is a device operating at level 1 of the OSI model that amplifies and resets the signal. This device operates at level 1 (Physical. The repeater amplifies and sends all the signals it receives from one port to all the remaining ports. The purpose of the repeater is to restore signals that are • weakened. go on the transmission without modifying c **3. Hub**

Picture 2 of Local area network - LAN: Devices - Part III

Also called multiport repeater, it has the same function as the repeater but has multiple ports to connect to other devices. The common hub has 4,8,12 and 4 ports and is the center of the star network. There are usually the following types of hubs: - Passive hub - Passive hub. - Active hub - Active hub. - Smart hub. - Switching hub. The hub operates at level 1 of the OSI model. **4. Bridge - Bridge** bridge is a device operating at level 2 of the OSI model used to connect small network segments with the same way of addressing and networking technology and sending data packets between them. . Data exchange between the two network segments is intelligently organized to allow bottlenecks at the connection points. The data exchanged only in a network segment will not be transmitted through another segment, which helps exchange data between two segments. **5. Switch - Switching (switch)**

Picture 3 of Local area network - LAN: Devices - Part III

Switching technology is a new technology that helps reduce network traffic and increase bandwidth. LAN switches (LAN switches) are used to replace HUBs and work with existing cabling systems. Like bridges, switches connect network segments and determine the segment that data packets need to send and reduce network traffic. The switch is fast and can support the new VLAN (Vitural LAN) functions. Switches are considered devices operating at level 2 of the OSI model