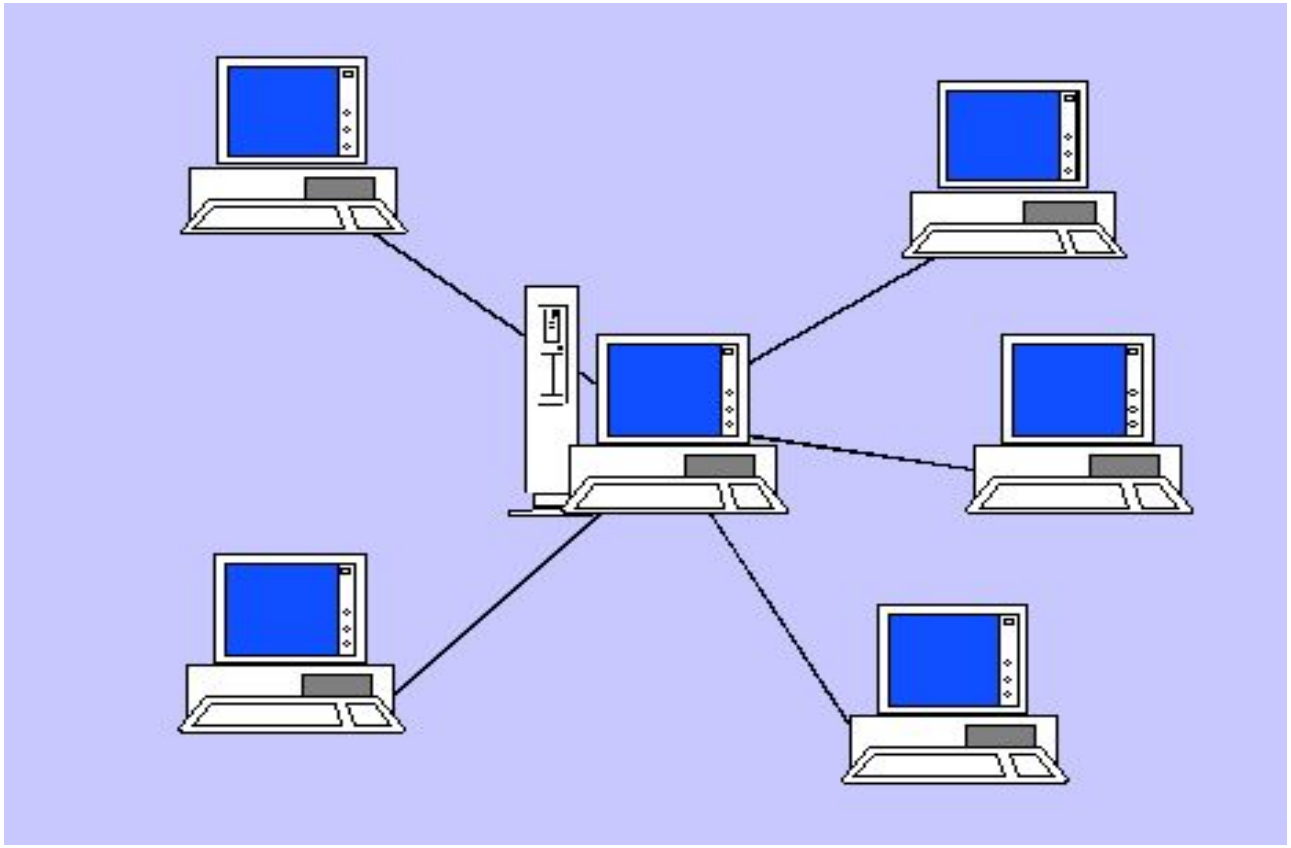
Star-shaped Local Area Network

A star is a basic topology of a computer network in which all computers in the network are connected to a Central node (usually a switch), forming a physical network segment



- ***Such a network segment can function both separately and as part of a complex network topology (usually a "tree"). All information exchange goes only through the Central computer on which in this way very big loading therefore anything other, except a network is assigned, it can't be engaged. As a rule, it is the Central computer is the most powerful, and it is entrusted with all the functions of network management.***

Dignities

- ***failure of one workstation does not affect the operation of the entire network;***
- ***easy search of faults and breaks in the network;***
- ***high network performance (subject to proper design);***
- ***flexible administration capabilities.***

Disadvantages

- ***failure of the Central hub will result in network (or network segment) failure as a whole;***
- ***network laying often requires more cable than most other topologies;***
- ***the final number of workstations in a network (or network segment) is limited by the number of ports in the Central hub.***

Application

- One of the most common topologies, because it is easy to maintain. Mainly used in networks where a category 3 or 5 UTP twisted pair cable is used.

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