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Internet & WWW

Introduction

In the present age of information Technology, Internet has changed many aspects of our daily lives. It provides an easy way to all users of Internet to search any information on matters related to any topic, for example, by using the World Wide Web, we can exchange messages, documents and e-services throughout the world while sitting at home or office.

Basics of Computer Networks

Computer network consists of two or more computers that are linked together in order to share resources, exchanging data or files and perform electronic communications. The computer network must have components like message, sender and receiver, transmission medium through which computer may be linked (such as cables, telephone lines, radio waves, satellites etc.) and protocols (rules that govern data communication).

Fig: Network connecting different type of devices

Types of Computer Networks

There are two main kinds of network: Local Area Network (LAN) and Wide Area Network (WAN).

Local Area Network (LAN):

LAN refers to a network or a portion of a network within a small geographic area such as an office building, universities/ college campus etc.
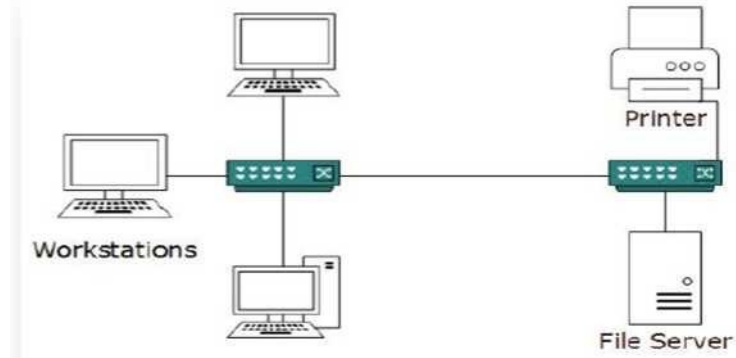
Fig.: Local Area Network

Wide Area network (WAN):

WAN stands for Wide Area Network. It refers to a network that covers a large geographical area such as country. In other words, WAN consists of two or more local-area networks (LANs).
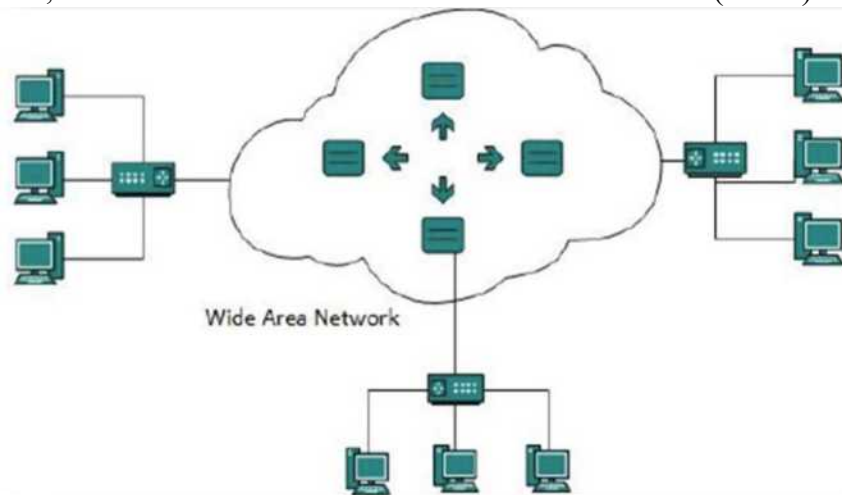

Fig.: Wide Area Network

Note:
- Ethernet is the most commonly used wired LAN technology. It is the way of linking computers together in LANs.
- RJ45 is a type of connector commonly used for Ethernet. In RJ45 the "RJ" stands for "Registered Jack," since it is a standardized networking interface and the "45" refers to the number of the interface standard. Each RJ45 connector has eight pins, which means an RJ45 cable contains eight separate wires.