Cisco:

Cisco's name is derived from the city San Francisco. Cisco Systems designs and sells communications and networking technology as well as services. By early 2000, Cisco was the third most valuable company in the entire world, ranking just behind Microsoft and General Electric Company.

Cisco Products

CCNA 200-301:

Achieving CCNA certification is the first step in preparing for a career in IT technologies. To earn CCNA certification, you pass one exam that covers a broad range of fundamentals for IT careers, based on the latest networking technologies, software development skills, and job roles.

CCNA Exam v1.0 (CCNA 200-301) is a 120-minute exam associated with the CCNA certification. This exam tests a candidate's knowledge & skills related to network fundamentals, network access, IP connectivity, IP services, security fundamentals & automation & programmability. Course, Implementing & Administering Cisco Solutions , helps candidates prepare for this exam.

o   Network fundamentals
o   Network access
o   IP connectivity
o   IP services
o   Security fundamentals
o   Automation and programmability

Next Generation CCNA Certification Exam	
CCNA	Change
CCNA Cloud	
CCNA Collaboration	
CCNA Cyber Ops	
CCNA Data Center	
CCNA Industrial	CCNA 200-301
CCNA Routing & Switching	
CCNA Security	
CCNA Service Provider	
CCNA Wireless	

Network:

o   A network is a collection of Computers connected together to share data.
o   The connectivity of two or more computers with each other to share data.
o   Network consists of two or more computers that linked in order to share resources.
o   Such as printers & CDs, exchange files, or allow electronic communications each other.
o   Computers on network may be linked through cables, wireless, satellites, or Bluetooth.

Networking:

o   Networking is a process of communication between the interconnected devices.
o   Networking basically allows us to share data, resources and store data and info.
o   Networking provides us platform to communicate with other users in network.
o   It allows multiple users to work on a single project & implement security policies.
o   Networking allows us to track and monitor the use of resources and all end users.
o   Networking is basically concept of designing a network, how device communicate.
o   Overall designing, installation and configuration of a network is called Networking.
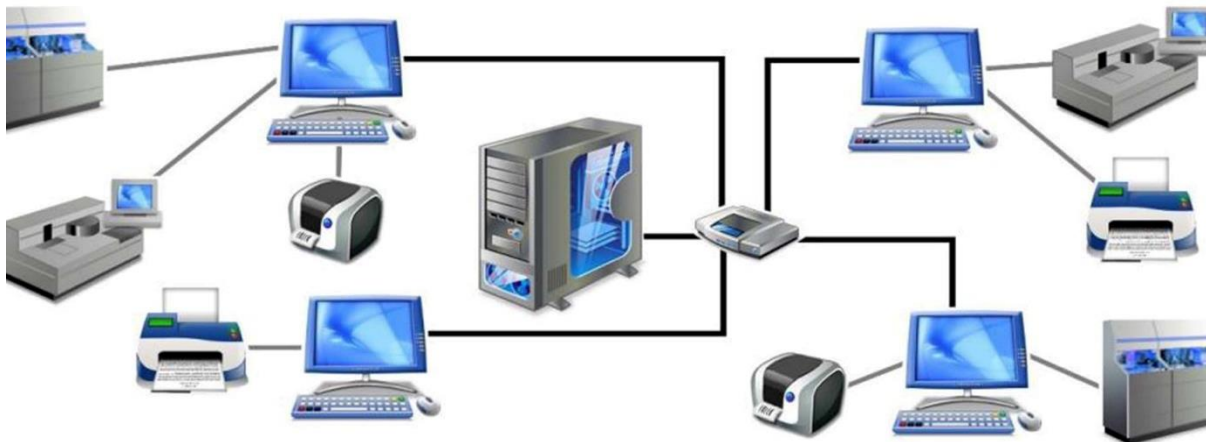
Types of Computer Network:

o   Computer network can be categorized based on geographical location & characteristic.
o   Computer network is group of computers linked to each other that enables communicate.
o   A computer network can be categorized by their size, Locations and characteristics etc.
o   Computer Networks categorize them according to their size as well as their purpose.
o   The Network allows computers to connect & communicate with different computers.
o   LAN, MAN and WAN are the three major types of the network designed to operate.
o   But there are many other types of computer network such as PAN, DAN, CAN, MAN etc.
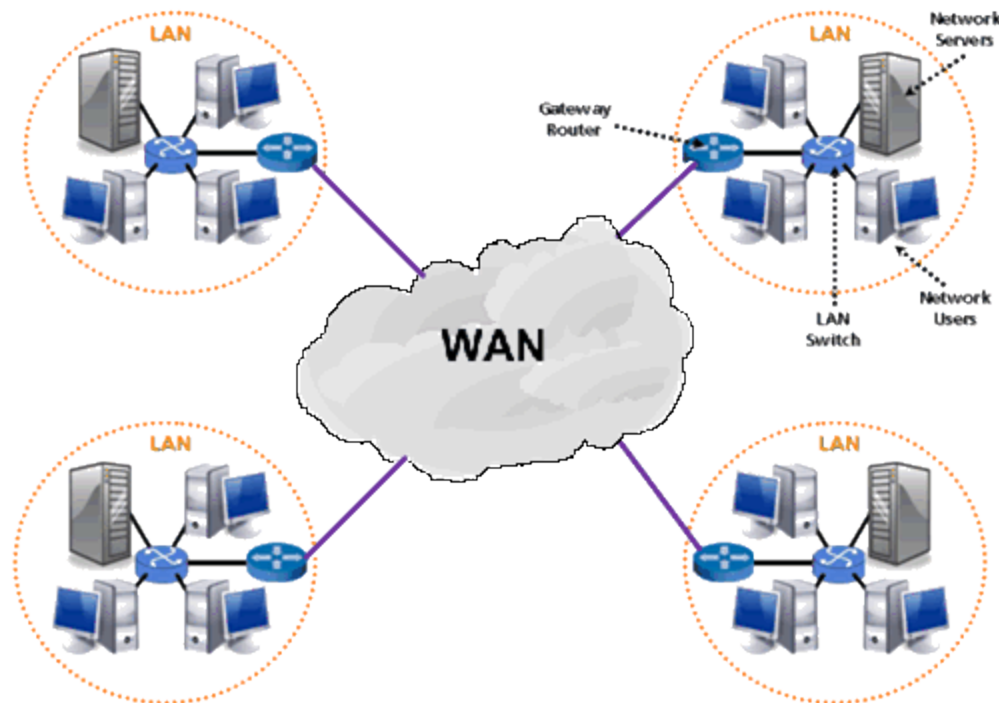
LAN (Local Area Network):

o   A LAN is a computer network which spans over a small geographical area.

o   A LAN is a network whose computers are located relatively near one another.

o   Example of Local Area network are such as home, building, office, school etc.

o   Data transmits at a very fast rate as the number of computers linked are limited.
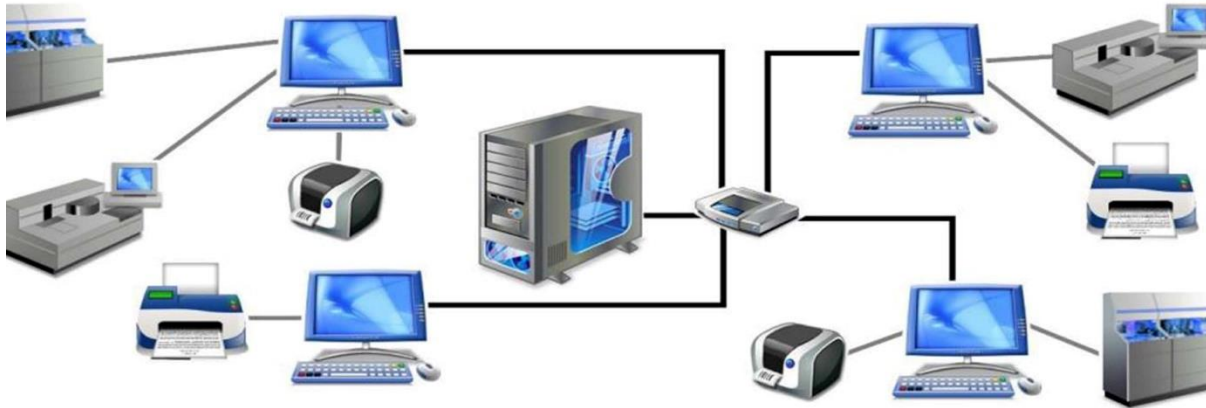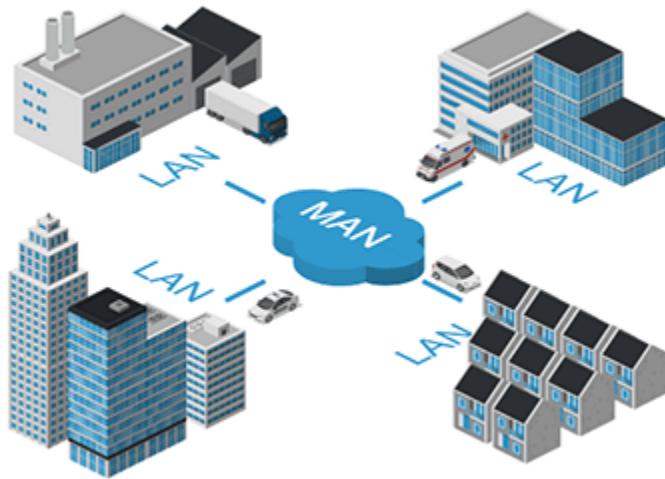

Local Area Network

WAN (Wide Area Network):

o   WAN is a computer network which spans over a large geographical area.

o   Example of Wide Area Network (WAN) such as state, region, country etc.

o   Wide Area Network are typically used to connect two or more LANs or MANs.

o   To provide connectivity, this network uses special devices, cables and technologies.

MAN (Metropolitan Area Network):

o   A network spanning a physical area larger than a LAN but smaller than a WAN.

o   MAN is computer network which connects two or more LAN networks within city.

o   A MAN is typically owned and operated by a single entity such as corporation.

o   When due to distance connecting two LANs is not possible, MAN network is used.

o   Metropolitan Area Network deploys special devices and cables to connect the LANs.

o   A Metropolitan Area Network (MAN) is a computer network that usually spans a city.

WLAN (Wireless Local Area Network):

o   Wireless computer network that links two or more device using wireless.

o   Example of Wireless Local Area Network is home, school, or small offices.

Campus Area Network (CAN):

o   Same as MAN network, but it is limited to a university or an education academy.
o   This network is usually setup for educational activities such as classroom updates.
o   This network is usually setup for practices labs, emails, exams, notifications, polls, etc.
o   CAN is a computer network made up of interconnection of LANs within a limited area.

PAN (Pearson Area Network):

o   Same as LAN network, but it is limited to specific person such as home network.
o   This network is setup for sharing resources such as internet and printer within PC.
o   It is smallest network which is very personal to a user include Bluetooth or Wi-Fi.
o   PAN has connectivity range up to 10 meters includes mouse, keyboard, TV etc.

Intranet:

o   Intranet is computer network which is controlled & administered by single entity.

o   Intranet is controlled and administered by single entity or company or organization.

o   An Intranet is basically a network that is local to the company only not outside.

o   Example of Intranet includes Local Area Networks LANs, Private WANs, and MANS.

o   In Intranet, external users are not allowed to connect to connect to Intranet Network.

o   Usually in this network, proper authorization is required to access any resources.

o   Each access is monitored & logged to ensure that only authorized users get access.
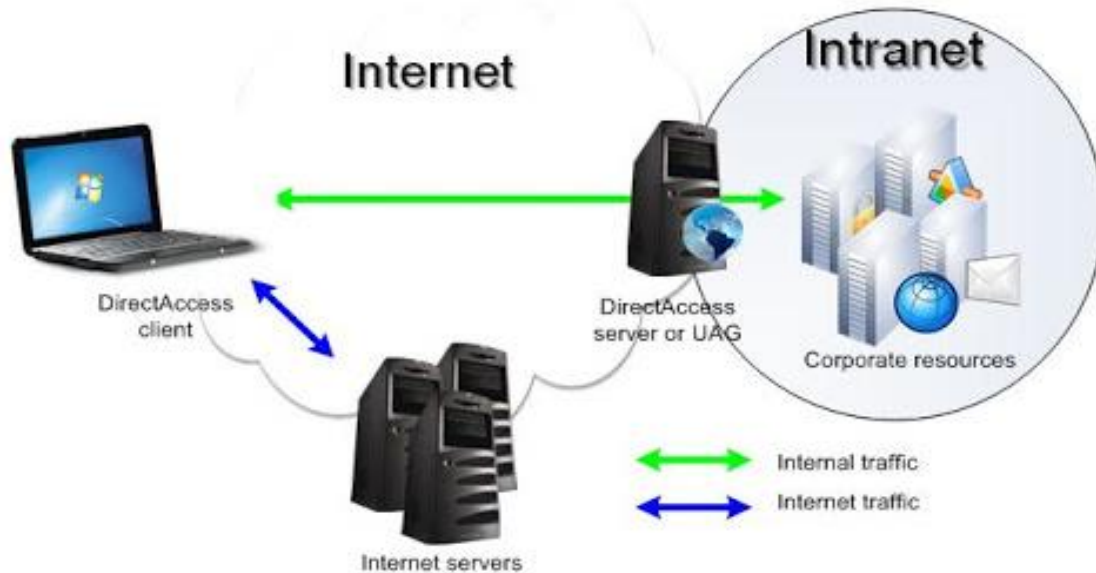
Extranet:

o   Extranet is extended Intranet where external users are allowed to access.

o   In Extranet only limited and small portion of network is available for outside.

o   Normally this access is filtered and secured by several security implementations.

o   Example of Extranet is Private Network between different organizations to share.
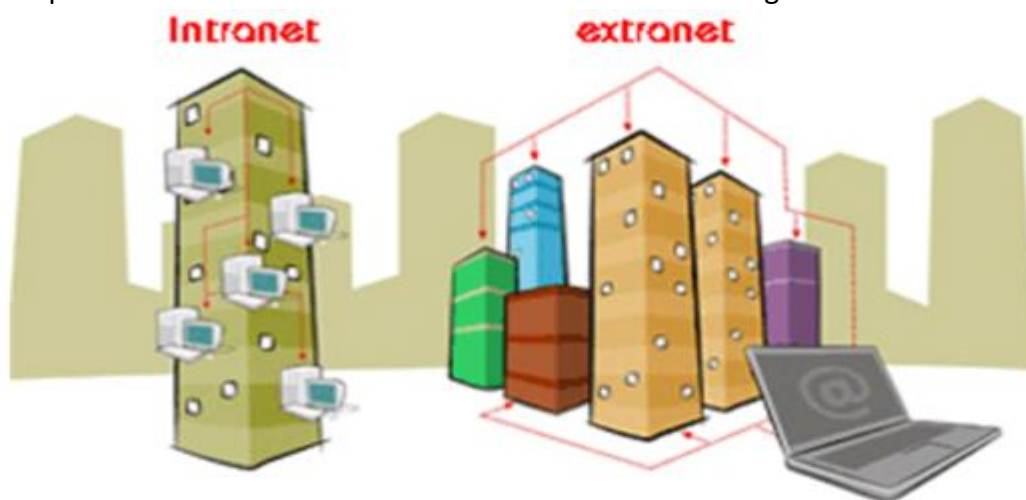
Internet:

o   Internet is the largest computer network ever created by the mankind.

o   It interconnects thousands of millions of computing devices including PCs.

o   Other example are Laptops, Workstations, Server, Smartphones, tablets, TVs.

o   Webcams, Environmental devices, Automobiles, Security cameras & many mores.
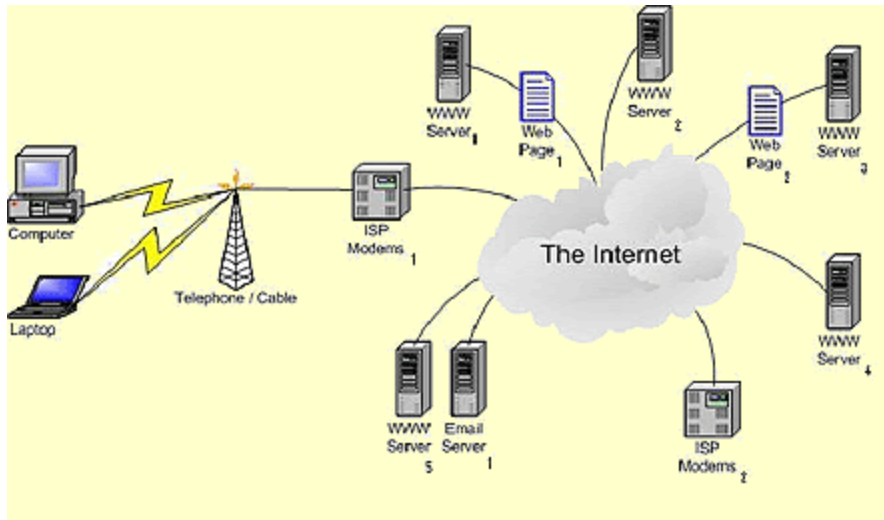
SAN (Storage Area Network):

o   Storage Area Network provide high speed infrastructure to move data.

o   SAN is a dedicated, high-speed network provides access to block-level storage.

o   A Storage Area Network is a high-speed sub network of shared storage devices.

o   SAN's works in way that makes all storage devices available to all servers on LAN.

o   Storage area networks are the most common storage networking architecture.