

DCN - Network Services

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Computer systems and computerized systems help human beings to work efficiently and explore the unthinkable. When these devices are connected together to form a network, the capabilities are enhanced multiple-times. Some basic services computer network can offer are.

Directory Services

These services are mapping between name and its value, which can be variable value or fixed. This software system helps to store the information, organize it, and provides various means of accessing it.

- **Accounting**

In an organization, a number of users have their user names and passwords mapped to them. Directory Services provide means of storing this information in cryptic form and make available when requested.

- **Authentication & Authorization**

User credentials are checked to authenticate a user at the time of login and/or periodically. User accounts can be set into hierarchical structure and their access to resources can be controlled using authorization schemes.

- **Domain Name Services**

DNS is widely used and one of the essential services on which internet works. This system maps IP addresses to domain names, which are easier to remember and recall than IP addresses. Because network operates with the help of IP addresses and humans tend to remember website names, the DNS provides website's IP address which is mapped to its name from the back-end on the request of a website name from the user.

File Services

File services include sharing and transferring files over the network.

- **File Sharing**

One of the reason which gave birth to networking was file sharing. File sharing enables its users to share their data with other users. User can upload the file to a specific server, which is accessible by all intended users. As an alternative, user can make its file shared on its own computer and provides access to intended users.

- **File Transfer**

This is an activity to copy or move file from one computer to another computer or to multiple computers, with help of underlying network. Network enables its user to locate other users in the network and transfers files.

Communication Services

- **Email**

Electronic mail is a communication method and something a computer user cannot work without. This is the basis of today's internet features. Email system has one or more email servers. All its users are provided with unique IDs. When a user sends email to other user, it is actually transferred between users with help of email server.

- **Social Networking**

Recent technologies have made technical life social. The computer savvy peoples, can find other known peoples or friends, can connect with them, and can share thoughts, pictures, and videos.

- **Internet Chat**

Internet chat provides instant text transfer services between two hosts. Two or more people can communicate with each other using text based Internet Relay Chat services. These days, voice chat and video chat are very common.

- **Discussion Boards**

Discussion boards provide a mechanism to connect multiple peoples with same interests. It enables the users to put queries, questions, suggestions etc. which can be seen by all other users. Other may respond as well.

- **Remote Access**

This service enables user to access the data residing on the remote computer. This feature is known as Remote desktop. This can be done via some remote device, e.g. mobile phone or home computer.

Application Services

These are nothing but providing network based services to the users such as web services, database managing, and resource sharing.

- **Resource Sharing**

To use resources efficiently and economically, network provides a mean to share them. This may include Servers, Printers, and Storage Media etc.

- **Databases**

This application service is one of the most important services. It stores data and information, processes it, and enables the users to retrieve it efficiently by using queries. Databases help organizations to make decisions based on statistics.

- **Web Services**

World Wide Web has become the synonym for internet. It is used to connect to the internet, and access files and information services provided by the internet servers.