Internet Connectivity Types

There are many connections that can be used for internet access. All the connections have their own speed range that can be used for different purposes like for home, or for personal use.

In this article, we will discuss different types of internet connections.

Dial-Up Connection

A <u>dial-up connection</u> is established between your computer and the ISP server using a modem.

A dial-Up Connection is a cheap and traditional connection that is not preferred these days as this type of connection is very slow.

To access the internet connection in the dial-up connection we need to dial a phone number on the computer and that's why it requires a telephone connection. It requires a modem to set up a dial-up connection, which works as interference between your computer and the telephone line. In this connection, we can use either an internet connection or telephone at a time.

Dial Up Connection

Broadband Connection

Broadband refers to high-speed internet access that is faster than traditional dial-up access. It is provided through either cable or telephone composition. It does not require any telephone connection that's why here we can use telephone and internet connection simultaneously. In this connection, more than one person can access the internet connection simultaneously.

It is a wide bandwidth data transmission that transports several signals and traffic types. In this connection, the medium used is coaxial cable, optical fiber cable, radio, or twisted pair cable.

DSL

DSL stands for <u>Digital Subscriber Line</u>. It provides an internet connection through the telephone line(network). DSL is a form of broadband communication that is always on, there is no need to dial a phone number to connect. DSL connection uses a router to transport data and the speed of this connection range between 128k to 8Mbps depending on the service offered. A DSL connection can translate data at 5 million bytes per second, or 5mbps.

DSL service can be delivered simultaneously with wired telephone service on the same telephone line due to high-frequency bands for data.

Cable It is a form of broadband access cable modem that can provide extremely fast access to the internet. The speed of this connection varies which can be different for uploading datatransmission or downloading. It uses a cable modem to provide an internet connection and operates over cable TV lines. The speed of cable connection ranges from 512k to 20Mbps.h

Satellite Connection

This type of connection is provided mainly in rural areas where a broadband connection is not yet offered. It accesses the internet via a satellite that is in Earth's orbit.

The signal travels from a long distance that is from earth to satellite and back again which provides a delayed connection. Satellite connection speeds range from 512k to 2.0Mbps.

Wireless Connection

As the name suggests wireless connection does not use telephone lines or cables to connect to the internet. The wireless connection uses a radio frequency band to connect to the internet. It is also an always-on connection and this connection can be accessed from anywhere and speed may vary for different locations. It ranges from 5Mbps to 20Mbps.

Cellular

<u>Cellular technology</u> provides wireless Internet access through cell phones. Speed may vary depending on the service provider. The most common are 3G and 4G which means from 3rd generation and 4th generation respectively. The speed of the 3G cellular network is around 2.0Mbps and the 4G cellular network is around 21Mbps the goal of the 4G network is to achieve peak mobile speeds of 100Mbps but the current speed of the 4G network is about 21Mbps.

ISDN

ISDN stands for <u>Integrated Service Digital Network</u> and it is a circuit-switched telephone network system, but it also provides access to packet-switched networks that transmits both voice and data over a digital line. It provides a packet-switched connection for data in increments of 64 kilobit/s.

ISDN connection provides better speeds and higher quality than traditional connections. It provided a maximum of 128kbit/s bandwidth in both upstream and downstream directions.