

## Types of Common Internet Connectivity

There are different types of internet connectivity available today; it can be widely categorized into wired and wireless access.

**Some of the commonly used Internet connectivity are:**

1. **Dial-Up:-** Dial-up Internet access is a form of internet access that uses the facilities of the public switched telephone network (PSTN) to establish a connection to an Internet service provider (ISP) by dialing a telephone number on a conventional telephone line. Dial-up connections use modem to decode audio signals into data to send to a router or computer, and to encode signals from the latter two devices to send to another modem. Dial-up connection is also known as Level Two Connection. This provides connection to internet through a dial-up terminal connection.
2. **Dedicated Access:-** A dedicated connection allows the user's computer to remain connected to the Internet all the time. Dedicated access is direct link to the Internet. A router is used to transmit data from one network to another.
3. **DSL (Digital subscriber lines) ->** DSL is another broadband service that many telephone companies and other providers offer to consumers. It is composed of several subcategories, the most common being
  - a. ADSL (Asymmetric Digital Subscriber Line)
  - b. SDSL (Symmetric Digital Subscriber Line)ADSL technology is a transport that allows faster flow of information downstream than upstream, while SDSL supports one speed regardless of upstream or downstream flow. ADSL supports data rate 1.5 to 9 Mbps when receiving data (known as the downstream rate) and from 16 to 640 Kbps when sending data (Known as the upstream rate). SDSL supports data rates up to 3 Mbps.
4. **Cable Internet Access:-** Cable Internet Access is a form of broadband Internet access that uses the cable television infrastructure. Cable Internet Access is provided through existing cable TV networks. This is similar to DSL that is provided over existing telephone lines.
5. **3G** is the third generation of wireless mobile telecommunications technology. It is the upgrade for 2.5G and 2.5G GPRS (General packet radio Service). 3G telecommunication networks support services that provide an information transfer rate of at least 144 Kbit/s. Later 3G releases, often denoted 3.5G and 3.7G, also provide mobile broadband access of several Mbit/s to smartphones and mobile modems in laptop computers.
  - a. UMTS (Universal Mobile Telecommunications)
  - b. HSDPA (High speed Downlink Packet Access)
  - c. EDGE (Enhanced Data rates for GSM Evolution)
6. **4G** is the fourth generation of broadband cellular network technology
  - a. LTE (Long Term Evolution)

- b. VOLTE (Voice over Long Term Evolution)
- 7. Wi MAX -> Wi MAX (Worldwide Interoperability for Microwave Access) is a wireless communications standard designed to provide mobile broadband connectivity across cities and countries through a variety of device. WiMAX is a long range system, connectivity across cities and countries through a variety of devices. WiMAX is a long system, covering many kilometers.