

Task 2

Identify and describe the different types of internet /intranet connections which allow people to access and view websites

Internet connections consists of

Dial up connections

It is an inexpensive but relatively slow form of internet access in which the client uses a modem to dial the ISP. Dial-up modems normally have a maximum theoretical speed of 56kbps, although in most cases they only reach up to 53kbps. Even though broadband is getting increasingly familiar with households, it is still the dialup that is the most popular form of internet connection

ISDN

(Integrated Services Digital Network) an international standard for switched, digital dial-up telephone service for voice and data. ISDN uses 64 Kbps "B" (bearer) channels to carry voice and data. A separate "D" (delta) channel is used for control. The D channel signals the carrier's voice switching it to make phone calls. There are two different types of ISDN

- BRI

ISDN BRI (Basic Rate Interface) uses one wire pair to carry two 64 Kbps B channels and one 16 Kbps D channel

- PRI

ISDN PRI (Primary Rate Interface) uses four wire pairs to provide 23 B channels and one 64 Kbps D channel

Cable Modem

A modem used to connect a computer to a cable TV service that provides Internet access. Cable modems can dramatically increase the bandwidth between the user's computer and the Internet service provider, especially in the downlink (from ISP to user). Unlike analogue modems that take time to dial a number, cable modems connect to the computer via an Ethernet port, which is an always-on connection. Ethernet is a shared medium, and the individual user's speed will vary depending on how many customers are sending or receiving data on that cable segment at the same time.

DSL

DSL is an excellent Internet access solution for Small to medium businesses. It is an affordable and easy-to-install way to access the Internet and connect your network to it. This high-speed "always on" service lets you access the Internet over ordinary phone lines at speeds up to 8 Mbps for downloads and 1 Mbps for uploads. A DSL modem and an Ethernet card are required for installation. A splitter may also be required. A splitter is a frequency filter that separates the high frequencies used for sending data upstream and receiving downstream data from the low frequency range used for voice. These high and low frequencies are transmitted at the same time.

Satellite Internet services

Satellite Internet services are used in locations where terrestrial Internet access is not available and in locations which move frequently. Internet access via satellite is available globally, including vessels at sea. There are three types of satellite Internet service:

- One-way multicast,
- One-way with terrestrial return, and
- Two-way satellite access.

One-way multicast satellite Internet systems are used for IP multicast-based data, audio and video distribution.

One-way terrestrial return satellite Internet systems are used with traditional dial-up access to the Internet, with outbound data travelling through a telephone modem, but downloads are sent via satellite at a speed near that of broadband Internet access

Two-way satellite Internet sends data from remote sites via satellite to a hub, which then sends the data to the Internet. In the U.S., each location requires a license from the FCC to operate. The satellite dish at each location must be precisely positioned to avoid interference with other satellites.

Intranet

A privately maintained computer network that can be accessed only by authorized persons, especially members or employees of the organization that owns it. It may consist of many interlinked local area networks (LAN) and also use leased lines in the Wide Area Network. Typically, an intranet includes connections through one or more gateway computers to the outside Internet. The main purpose of an intranet is to share company information and computing resources among employees. An intranet can also be used to aid working in groups and for teleconferences.

Advantages

- Cost-Effectiveness
- Ease-of-Use
- Publishing
- Reliability

Disadvantages

- Significant challenge to maintain
- Technological framework can be problematical
- Might be more costly than effective

