

E-Content of INTERNET TECHNOLOGY AND WEB DESIGN

Chapter: 3.5 Internet Accounts by ISP

Topic: 3.5.1 Telephone line Options

Telephone line Options

Dial-up Connections

- Dial-up Internet access is a type of Internet connectivity that operates through a standard telephone line.
- Dial-up access refers to connecting a device to a network via a modem and a public telephone network.
- Dial-up access is just like a phone connection the only difference is that; rather than people at the two ends computer devices are present.
- Dial-up access uses normal telephone lines thus the quality of the connection is not always good and data rates are limited.
- Dial-up internet access is offered through a number of Internet Service Provider (ISP).
- Most ISPs lease a set of telephone numbers, sometimes local, sometimes national, that dial into network pipeline that feed into the Internet.
- Open joining a dial-up service, the subscriber chooses a user name and password.
- Once the modem calls the phone number and makes a connection a “handshake” takes place in which information is exchanged between the computer modem and the remote server.
- The user name and password is supplied by the modem.
- This grants the user access through the dial-up gate way to the Internet.
- Dial-up service is least expensive but also the slowest type of Internet access.

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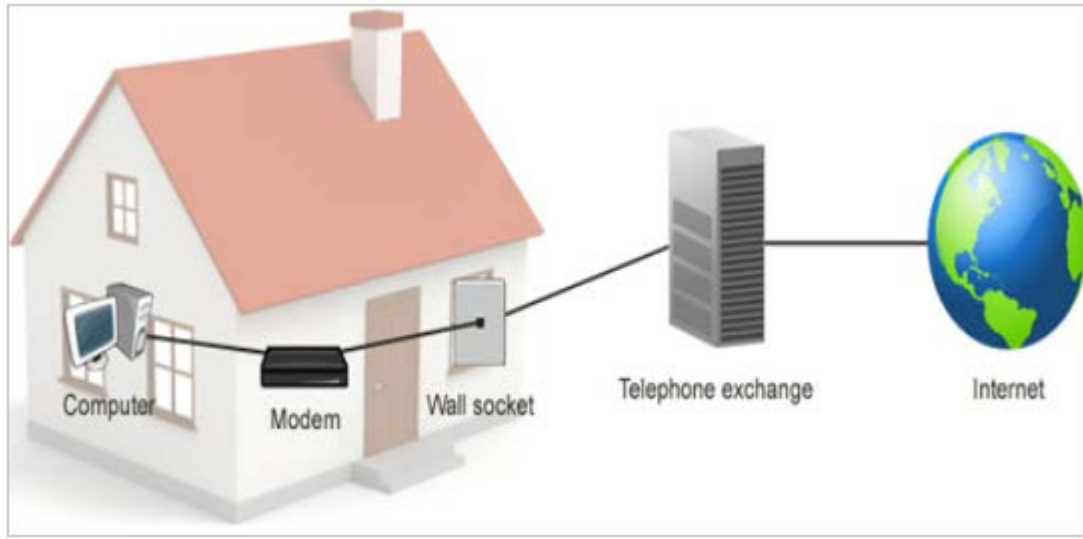


FIG 3.6: Dial-up Connection

Connecting to Dial-Up Internet Accounts

- Click on Start and point to Control Panel.
- Click on Network and Internet Connections.
- Click on Network Connections.
- Click on Create a new connection.
- Click on Next.
- Select Connect to the Internet and Click Next.
- Select Set up my connection manually and Click Next.
- Select Connect using a dial-up modem and Click Next.
- In the open field type in “Setarnet” and Click Next.
- Type in the phone number for ISDN dialup and Click Next.
- Type in the “Username” and “Password” and Click Next.
- Click Finish and the Internet setup are complete.

Dedicated Access

- Dedicated Internet Access is a reliable and scalable worldwide Internet access service.
- It is specifically designed to maximize today’s business-critical VPN connectivity needs.

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- The ISPs managed Internet connectivity with a comprehensive suite of services features, all at the fair market price required by global businesses.
- The key benefit of dedicated access is that it is cost effective and it provides reliable internet access.

ISDN Connection

- ISDN is abbreviation of Integrated Services Digital Network.
- ISDN is an international communications standard for sending voice, video and data over digital telephone lines or normal telephones wires.
- ISDN supports data transfer rates of 64 Kbps (i.e., 64000 bits per seconds).
- It is mostly designed for leased lines.
- Configuration allows for multiple types of terminations. It uses a Terminal Adapter (TA) for termination and it is not a modem.
- There are two types of ISDN.
 - Basic Rate Interface (BRI)
 - Primary Rate Interface (PRI)
- Basic Rate Interface (BRI)
 - It consists of 64 Kbps B-Channels and one D-Channels for transmitting control information.
- Primary Rate Interface (PRI)
 - It consists of 23 B-Channels and one D-Channel (U.S.)
- The original version of ISDN employs base band transmission.
- Another version, called B-ISDN, uses broadband transmission and is able to support transmission rates of 1.5 Mbps. -ISDN requires fiber optic cables and is not widely

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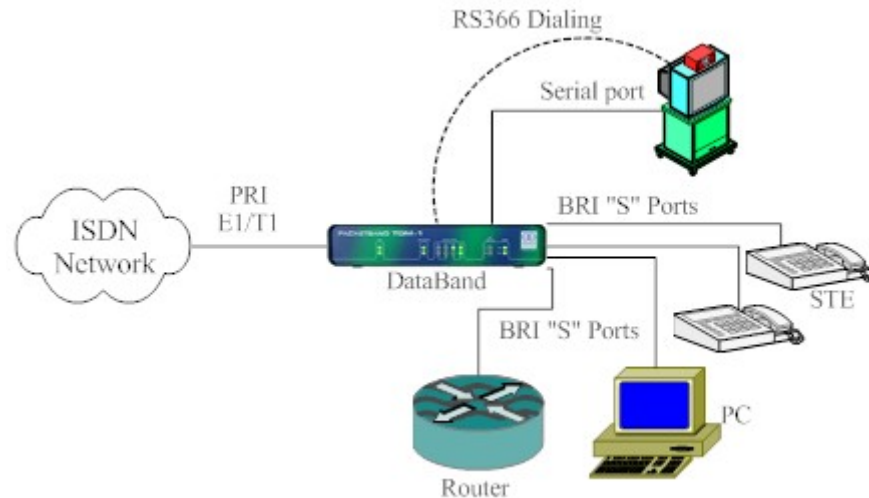


FIG 3.7: ISDN Connection

ISDN Services

- ISDN telephony
- ISDN telecopy
- ISDN and analog terminals
- Call forwarding
- Call waiting
- CLIP (Calling Line Identification Presentation)
- CLIR (Calling Line Identification Restriction)
- Three-party conference
- Advice of change
- Malicious call identification

Advantages of ISDN

- Digital services with less error.
- Direct fast connection with no dialing.
- Higher bandwidth (Takes less time in downloading material).
- Supports multiple users.
- Able to use ISDN for more than one task.

Disadvantages of ISDN

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- ISDN is more expensive to install than a standard telephone.
- Not easy to set up.
- All exchanges do not provide ISDN service.