DSL Essay, Research Paper

Digital Subscriber Line

Digital Subscriber Line new technology that takes advantage of standard copper telephone line to provide secure, reliable, high-speed Internet access. DSL refers to the family of digital subscriber line technologies, such as ADSL, HDSL, and RADSL. Connection speed for DSL ranges from 1.44 Mbps to 512 Kbps downstream and around 128 Kbps upstream. Unlike traditional connections DSL such as analog modems and IDSN, DSL deliver continuous ?always on? access. That means multimedia-rich websites, e-mail, and other online applications are available anytime. DSL makes it possible for you to remain online even while you?re talking on the telephone-without jeopardizing the quality of either connection.

DSL is available in a spectrum of speeds. Some are best home use, while others are designed to accommodate rigorous business demands. Whether for business or the home, DSL, offers unsurpassed price/performance value compared to other online options. There are the five facts that one should know about DSL.

It is remarkably fast. With DSL service, you can benefit from Internet speeds that are up to 12 minutes faster than a typical ISDN connection and 50 times faster than traditional 28.8 Kbps modems. This means that in the 12 seconds it takes to read this information, you could have downloaded a 2 megabyte presentation file or web photograph. It would take 10 more minutes (600 more seconds!) to download the same with a traditional 28.8 Kbps.

It?s highly reliable. One can depend on DSL because its proven technology takes full advantage of the existing telecommunications infrastructure. It?s inherently secure. DSL network provides a dedicated Internet connection via private telephone wires, you can bypass dial-up intruders or shared network hackers. Unlike traditional dial-upp modems or cable modems. DSL protects your valuable data with the most secure connection available.

It?s surprising affordable. DSL is widely recognized as the most cost-effective connectivity solution for small buisness. DSL delivers industrial- strength like speed to multiple users at only 25% of typical TI costs. There is no better price option available. DSL is also an exceptional value for home users. At about $2 a day for services that meets the needs of most people.

The connection is always on. It?s ready to run every minute of the day. There?s no more logging on and off. No more busy signals or disconnects. This gives you the freedom to focus on what you want to accomplish on line rather than focusing on trying to get connected. In fact, you can be more productive because the power and immediacy of the internet is continuously available at your fingerprints.

DSL is a network access technology that telephone companies have been testing and refining since the beginning of the decade. It has unique advantages that it can provide high speed digital transmission over 750 million ordinary phone lines that make up our communication infrastructure.

Speed384 Kbps128 Kbps28.8 Kbps

2 Mb image files72 seconds3.6 minutes15.9 minutes

72 MB video43 minutes2.2 hours9.6 ours

DSL enables today?s users to gain continuous access to the Internet or corporate Local Area Neworks (LANs) at an amazing rate of 25 times to 100 times faster than the 56.6 kilobits per seconds modems. DSL modems use sophisticated digital coding techniques that squeezes up to 99% or more capacity out of an ordinary phone line, making a super-fast network access possible.

DSl was originally developed to support video on demand services that telephone companies planned to offer to compete with cable companies. However most companies have backed away from these services. Instead, DSL?s high speed capacity have made it the technology of choice for the majority of the lines leased by large corporation for private voice and data networks.

DSL comes in many different varieties:

ADSL

Asymmetric or Asynchronous Digital Subscriber Line service transmits faster on direction (1.544 Mbps downstream to the house) than the other (384 Kbps to the the telephonw company?s CO). ADSL bases services offer high power Internet users who want to download large files and other resources from the Web in less time than it normally would.

SDSL

Symmetric Digital Subscriber Line (also know as the single line) provides 144 Kbps of bandwidth in both directions. SDSL?s is cheaper than other services provided by DSL. It has the ability to transfers information in both directions. It?s ideal for most buisness applications, including internet access, or connecting remote offices of large corporations.

IDSL

ISDN Digital Subscriber line service is designed to accommodate users that already invested in ISDN. This is buisness oriented service, it provides ISDN signalling at 144 Kbps over a DSL circuit. It plugs into existing ISDN equipment a local carrier?s CO.

HDSL

High speed Digital Subscriber Line, it runs approximately 6 Mbps. This service is used to provide T-1 digital servies (1.544 Mbps) over standard telephone lines.

VDSL

Very High-Speed Digital Subscriber Line is the