Dsl Essay, Research Paper

DSL TECHNOLOGY

Whether at home or at work, at school or on the move, we all want more speed from every service we choose to use. The theory goes that the greater the speed of service delivery we obtain to meet our daily needs – from grocery shopping to information and entertainment – the more leisure time we can create for ourselves to enjoy. The fact is that in an accelerating world, our expectations and demands keep outstripping the art of the possible and the result is frustration and stress.

What we need is some acceleration of the access technologies to deliver that world to us – and those speedier access routes really are just around the corner -coming soon to a telephone line near you in the form of DSL (Digital Subscriber Line).

Put simply, DSL gives the humble and ubiquitous copper wires that run throughout the world to provide POTS (plain old telephone service), the capacity to send enormous volumes of data at very high speeds. With DSL, it’s not just a phone line, it’s a lifestyle.

Some DSLs do that in parallel with the standard voice service, all on the same line and at the same time. Some deliver higher speeds or wider bandwidth – the more dense the data you are sending, the wider the bandwidth you need for quality and speedy transmission. Still others deliver higher capacity for downloading than for uploading data. There is a whole portfolio of DSL technologies coming on stream to match user needs at home and at work. The new millennium is about to put a completely new dimension into those telephone lines we have all come to take for granted.

Already there are towns and cities around the globe which really are wired for speed with DSL. There are even whole countries which are DSL-ed – like Singapore where ADSL on the phone lines have been given the capacity to deliver video on demand.

Here are the basic requirements for a high speed internet access technology that makes sense for consumers:

+ No special equipment to install- and no need for a second phone line. For every home to install a second phone line for internet access would be an unreasonable expense for the consumer, and a huge burden for the phone system. An ideal solution would allow use of the same line for voice and internet access simultaneously.

+ Compatibility with existing PC’s.

+ Compatibility with existing phone network; that is, no rewiring necessary.

+ Low cost. Consumer price points should be comparable to existing analog modems.

+ Available ASAP!!

That’s what DSL is all about. DSL is a recent innovation that maximizes the existing copper wire network by taking advantage of unused bandwidth. You may also hear of HDSL, HDSL-2, VDSL and many more DSL-based acronyms. Whatever the prefix, the

message is fundamentally the same: DSL equals point to point connection over your existing telephone line for high-speed data and/or voice. With DSL you are wired for speed.

This point to point connection is a key to speed and to security of data. It means that your data connection over a DSL service, like your telephone call, is a direct link between you and the other party. There is no line sharing, as there is on cable modem, to reduce the speed of transmission nor to place security of your information at risk.

And if you are routinely sending, viewing or downloading dense data – from graphics and photographs to music and video clips or even PowerPoint presentations and databases – you will probably never be happy until you have hooked up to the speed and security of DSL technologies.

DSL has the right offer mix, and providers are discovering what their pricing plans should be. Still, all of this must fit the economic models of the characteristic business or household in the United States.

ADSL is the asymmetric version of DSL – offering differing upload and download speeds. This can deliver up to seven megabits of data per second from the network to the customer (downstream) and up to 640 kilobits from the customer back to the network (upstream), all while providing voice communication on the same copper line at the same time. Compare that with the standard 28 or 56k modem and you start to appreciate the difference DSL will make. Since few of us use Internet access to send seriously large documents but all of us use it to access data-intense information such as websites with heavy graphic content, this asymmetric service will more than meet most needs.

GTE, soon to be part of Bell Atlantic, plans to offer DSL throughout their network. Their advertising claims, with substantially more truth than Al Gore, to have created the internet. (Their BBN division did, in fact, manage most of the early Internet architecture.) They are already one of the largest internet providers, including provisioning the actual service delivered for most of the customers of AOL. Their backbone, which also supports the much higher quality service they offer to businesses through BBN (now called GTE Internetworking), stretches 12,000 miles in the United States and extends around the world. By the end of the first quarter of 1999, service was provisioned in more than 400 central offices. By the end of 1999, GTE plans to offer ADSL in more than 30 markets in 17 states, served by approximately 550 central offices that support 10.1 million customer access lines – one of the nation’s largest deployments of ADSL.

Well, with GTE Digital Subscriber Line (DSL) Service you can have incredibly fast, “always on” access to the Internet, with connection speeds up to 1.5 Mbps (megabits per second). That’s up to 50 times faster than 28.8K modems. With DSL, just click and you’re online. And the price range is from $32 to $215 depending on the services u may need.