## DSL vs. Cable

Digital Subscriber Line (DSL) and Cable Internet are the two dominant ways to 'get connected' these days (now that the dial-up era is over) yet their technologies differ significantly. Whether you should go with one or the other will depend on your circumstances and the type of customer you are. Beware not to fall for the advertising promises, since words like "speed" may not apply to you, even though they ring true to the technology itself. Knowing the basics about security and speed will help guide your decision-making when choosing an Internet Service Provider (ISP) and enable you to ask all the right questions before being sold into the deal.

Security is a much debated issue when it comes to DSL and Cable differences. At its core, DSL boasts more protection because each line is a dedicated one, meaning your connection is not shared with other users. This way, even if you have a static IP address\*, the chances of a hacker gaining access to your data is slimmer than with Cable. Cable operates differently, providing connections to clusters of users in a given area through the same line. Without any security measures in place (such as firewalls), any user would be able to easily discover the names and addresses of neighbours subscribed to the same base and even access their data in the event file sharing is an included feature in the cable service. Today, many of these issues have been resolved and protective software can prevent the events just described. Also, dynamic IP addresses make each computer a 'moving target' that makes life more difficult for the hackers. A commercial consumer may not have a problem settling for Cable Internet (provided security is promised by the ISP), but businesses with paranoia about keeping information classified, or ones that need a static IP, should consider DSL as a primary option.

Speed can depend on a number of factors but the main ones within control of a consumer are location and other users online. If you are remotely located from a DSL provider's mother ship, where Internet is fed through the copper wires to reach your router, chances are by the time the packets of information arrive at their destination a good period of time will have elapsed. This is why DSL may be hard to find in some areas and a consumer will be forced to opt for Cable, which uses many nodes in a network to deliver data to computers (so distance is not an issue). However, since Cable providers put many users on the same delivery path, traffic jams are more likely, especially during peak usage hours. So even though cable is technologically faster, when the rubber hits the road the story is quite different. This is one reason DSL has gained rising popularity. By opting for dedicated lines, customers don't have to bother 'dodging' other users to get a fast connection.

In the end, it may also come down to what providers are available in your market area. Though you may prefer to go with one or the other, you may have to settle for the opposite based on your conditions. Price differences are nominal these days, especially in the more competitive markets, so don't let that be a major factor in your decision making. Both types will advertise being "high speed", but as mentioned, that will depend more on the pickle you're in than on your ISP. When making your choice, focus on the quality the connection will bring you, taking into consideration the advice and knowledge you've just acquired.

\*Just for clarity's sake, IP addresses are necessary for computers to locate and communicate with one another. They come in two different forms, static and dynamic. Dynamic types are more common and work through a special software program that constantly assigns a new number to your computer so that hackers can't keep track of you. Static IPs rarely, if ever, change and are used for destination hubs that require the same 'address' on the Internet at all times so that they will always be findable to their remote users. For example, VoIP services necessitate a static IP, as well as businesses with field employees and Web hosts.