Broadband speed
for your business or home



Ask your carrier about

DSL Services that give you the Lucent Advantage™

With DSL, you can:

- Experience the best value for your money
- Keep your broadband costs down
- Maintain reliable performance

Lucent Technologies
Bell Labs Innovations

DSL Services



Digital Subscriber Line (DSL) service utilizes technology that takes otherwise unused frequencies for carrying voice on copper lines and converts them into available bandwidth.

This enables voice, high-speed data, and multimedia services to be carried on the copper lines simultaneously. DSL is ideal for home office and small business needs, as well as personal use.

Today when every minute counts, the Internet keeps growing in importance at home and the office. It is one of the most versatile timesaving tools now available. However, the Internet's benefits are more powerful when a user is able to get to Web pages faster, listen to high-quality audio, see distortion-free video clips, and download files with the efficiency that would be all but impossible with a dial-up connection. That's why more Internet users are turning to Digital Subscriber Line (DSL) technology, which transforms a standard phone line into a cost-effective, high-speed connection.

DSL can deliver information hundreds of times faster than the typical 56 Kbps dial-up modem. As a result, this broadband technology reduces the time needed to download Web pages, data files, graphics and animations. It enhances performance for real-time audio, video and multimedia — enabling better business presentations and more satisfying home entertainment. For further efficiency, DSL even eliminates the dial-up process. These high-speed connections are "always on," ready to be used right away.

DSL benefits for businesses

Small and medium-sized companies gain sophisticated network capabilities that help save time, boost productivity and improve customer service. Previously, these high-bandwidth applications required an expensive T1 line. But now, DSL technology uses standard copper phone wiring to deliver a wide range of speeds, often well past T1 rates, allowing a company to save money by right-sizing its access connection speed. In fact, DSL can achieve transport speeds up to 8 Mbps today, depending on distance from the serving DSL access multiplexer (DSLAM). New standards will allow speeds beyond 20 Mbps.

Using DSL, businesses can give their employees the same desktop performance at home as in the office, boosting work-at-home productivity. Additionally, voice over DSL can replace traditional voice service arrangements and greatly reduce voice service costs for a business.

The advantages at home

Besides speeding up basic Web surfing and research, DSL also helps home computers keep pace with today's growing array of communication and entertainment services. Broadband allows quick exchange of photos, multimedia files, and graphics, for home office or personal use. It also enables popular entertainment features such as Internet radio and animated gaming. With new multimedia tools and toys emerging every day, DSL opens the door to a richer Web experience.

Experience the best value for your money

The right DSL service plan will satisfy a subscriber's technical requirements without exceeding most budgets. Here are a few basic points to keep in mind while balancing price and performance.

Types of DSL

DSL offers a variety of "flavors" designed to meet the needs of different online applications and users. The key variations involve speed and the direction in which this speed is delivered. For example, asymmetrical DSL (ADSL) offers higher data rates going "downstream,"—toward the subscriber—than it does in the other direction. ADSL satisfies the needs of residential subscribers who spend most of their time downloading information from the Internet. But businesses

may need symmetrical high-speed DSL (SHDSL) because enterprise users regularly send as much data upstream as they receive downstream. Or they may need plenty of bandwidth for the two-way communication provided by applications such as videoconferencing. Carriers can explain which types of DSL are best suited to an application.

Cost considerations

Many carriers have developed tiered pricing that allows subscribers to choose premium service at higher rates — or slower service that costs less. But to be truly cost-effective, the subscriber's choice needs to provide adequate speed for key online applications.

Service "bundles" also offer a cost-effective way to take advantage of DSL. In this case, service providers offer a number of telecommunications services, such as DSL, wireline voice service, voice mail, and wireless, for a single economical price. This approach not only cuts the cost of broadband access, it provides the convenience of paying one bill for all the services. Service providers can provide more information about bundled services they may offer.

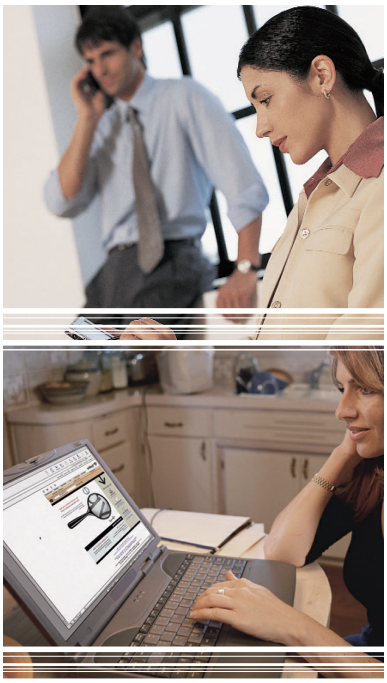
Keep broadband costs down

DSL can be cost-effective for small and medium-sized businesses, as well as residences, because it minimizes expenses in a number of ways. First, it eliminates the need to install special wiring, because DSL carries data and multimedia over the same phone lines used for voice calls.

For further economy, this technology allows voice calls to be dialed during high-speed Internet connections—as if two phone lines are available for the price of one. And a DSL home or small office network can be set up to support multiple Internet connections simultaneously, for additional savings. In comparison, multiple simultaneous dial-up access requires a separate phone line for every Internet connection, with each line adding more expense, yet delivering lower speeds.

Maintain reliable performance

DSL provides a predictable performance level and is inherently secure. This is because copper lines are not shared among subscribers. The service provided on a copper pair belongs only to the subscriber. The individualized nature of DSL service also means that each subscriber's service can be independently monitored for performance and consistency.



Get the Lucent Advantage™

Because Lucent Technologies has always been a leader in DSL, carriers that deliver the Lucent Advantage™ offer important benefits to business and residential users, including high performance, reliability and quicker access to today's advanced features. These benefits grow out of expert product design, which gives carriers more effective ways to serve their customers. Ask your carrier for DSL services that give you the increased bandwidth you need for efficient networking at a price you can afford. Here are some examples of how Lucent is helping carriers deliver DSL Services with the Lucent Advantage™:

- Lucent DSL platforms, the AnyMedia® Access System and the Stinger® DSL access concentrator have sophisticated line-testing capabilities to enable a carrier to efficiently find and resolve problems with a customer's line.
- Lucent offers a suite of operations and management systems that allow carriers to deliver DSL services without a lengthy wait.
- Lucent DSL portfolio is built with reliability in mind. The same proven technology that makes the voice network so reliable is leveraged to design hardware and software to make DSL service reliable and available when it's needed.
- Both the Stinger® and AnyMedia® platforms have models that help service providers overcome a common obstacle to DSL deployment: service reach. This allows more subscribers to take advantage of DSL technology, even in remote locations.
- For a home or office, the Lucent CellPipe® provides a highly reliable, flexible DSL modem that can upgrade easily to accommodate a new class of service.
- Lucent offers service management capabilities – such as VitalAgent® – that give carriers tools to measure, monitor, and report on SLAs for DSL service, and to perform remote troubleshooting.

Local telephone service providers can provide more detailed information about DSL services in their area.

To learn more about Digital Subscriber Line Services, please contact your carrier. Be sure to ask for services that leverage the Lucent Advantage™.

To learn more about Lucent Technologies, visit our web site at http://www.lucent.com.

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