Would You Like that With or Without Wires?

by Mark Navin

Japan enjoys some of the cheapest and fastest Internet access in the world. These high speeds are generally down to the two types of physical line that allows you to speak on the phone and connect to the Internet. The two kinds are ADSL (Asynchronous Digital Subscriber Line) and optical fiber, or *hikari* fiber in Japan (hikari means light in Japanese). The essential difference between the two is that ADSL transfers data over copper telephone lines and hikari fiber is via fiber-optic cable.

ADSL is slowly increasing connection speeds and can reach speeds of 50 Mbps (megabit per second). Hikari fiber transfers information via infrared light and starts at 100 Mbps. Whether you can get the faster hikari fiber connection depends on whether the national telecommunications giant, NTT, has installed the cable in your area. Eventually all connections will have a fiber-optic "backbone" as NTT upgrades the system. ADSL, therefore, doesn't really have a long-term future.

It's important to bear in mind that you won't automatically receive the advertised top connection speeds. There are many considerations, not the least of which is the connection speed of the Web site you are trying to contact. If the site is housed on a slower connection, like a dial-up, it will be reflected in how quickly you can download the pages.

Speed also depends on how many people are connecting to the site and how many other connections are using your basic link to the Internet. Few companies offer single user connections and guaranteed speeds for home connections. It is simply too expensive. What the cheaper home connections get is a shared arrangement, or contention ratio, and a "best effort" for speed within parameters. Unless you need to download huge amounts of data, this is more than sufficient for the home user.

It can be somewhat confusing when applying for a connection to the Internet in Japan. There is a popular basic NTT service called B Flet's (**www.ntt-east.co.jp/product_e/05/index.html**) for the Tokyo area. This is the physical connection to the Internet, but you will need access to the Internet via an ISP (Internet Service Provider), such as OCN (**www.ocn.ne.jp/english/**) or Global Online (www.gol.com/english/service/adsl.html). Global roaming connection companies like JENS SpinNet (**www.spinnet.jp/service/indexe.html**) give you the option of getting online when you're traveling, as well as when you're at home.

The physical connection from the phone company usually finishes in the home with a small box called a modem if it is ADSL, or a DSU (Digital Switching Unit) if it is fiber, from which you connect using a network cable. But running a network cable from your computer to the connection box has its limitations in that you can only connect one particular PC to the Net.

With so many households using more than one computer, many people use a box called a hub or switch router that sits between the DSU or modem and the PCs. Newer models connect directly from your PC to the incoming line, so skipping the DSU or modem. Since you need to authenticate your account, this intermediary box will need configuration. Usually this can be done through a Web-based interface and as this is Japan, the language is Japanese. Buffalo-Melco produces a number of products and is popular and reasonably priced (**www.melcoinc.co.jp/**). Members can get configuration problems sorted out by the Club's IT service, CompuCare (**www.compucare.jp**).

One technology movement over the last few years has been to get rid of those wires and cables, unchaining your computer, so to speak. Wireless, or Wi-Fi, connections mean less clutter, but they also add a layer of complexity. You first have to deal with a number of different protocols or products. Some have exotic names like Bluetooth (**www.bluetooth.com/**) and Blackberry (**www.blackberry.com/**), which are both unavailable in Japan for general use, and others have incomprehensible names like 801.1 a, b, g, and h. It doesn't matter which one you choose provided the connecting box and the PC use the same protocol. A majority of wireless connecting boxes available is multi-protocol and will work with most wireless cards installed in PCs or notebooks. Many ISPs and B Flet's have recommended hardware for wired and wireless connections. You shouldn't need to part with more than ¥40,000 for a top-of-the-line unit.

Since wireless technology provides connection via a short-range radio frequency, anyone close enough to the source of the signal (the hub) can receive it. Businesses, therefore, use encryption to stop just anybody within the broadcast range accessing the network. While it is advisable to use encryption, if you are a roaming notebook user, remembering configurations and passwords can be tiresome. Most traveling users connect to their offices using VPN (Virtual Private Network) encrypted software.

While Web browsers use a secure socket called https:// (a variation of http://, which you can often see at the start of a Web site address) when the user wants to buy something online using a credit card or input bank details, nothing is completely secure. The yellow lock icon in the bottom right-hand corner of the screen does indicate that extra security measures are in place, but an open, unencrypted connection is by definition, unsafe.

Make the most of the cheap and fast access to the information superhighway in Japan: the one place where speed limits don't apply. □

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