

## Super Connected

By Renato Cruz Sogueco

PLANNING TO INSTALL A VOICE OVER INTERNET protocol (VoIP) phone system, host your own Web sites or connect all of your locations to the main shop system over a virtual private network (VPN)? Or are you simply tired of slow download speed and willing to do something about it? Great! How uber-tech of you. But it's not going to happen using dial-up or integrated services digital network (ISDN). This month, Floral Management will guide you through bandwidth upgrades. Next month, we'll talk about types of broadband applications that could revolutionize your business.

### T1 is History

In the past phone companies were charging so much for T1 connections because, until recently, it was the only broadband solution; however, faster connections, such as cable, DSL and fiber optic, and the growing adoption of VoIP (which allows phone service over broadband), T1s are no longer the only option. Consequently, you may have noticed phone companies reducing the price of T1s. Don't be tempted. Even if they reduced a T1 to \$50 a month, it still wouldn't deliver the value. For around \$500 a month you get an upload and download data connection speed of 1.5 Mbps with a T1 line. With cable, DSL and fiber optic, you'll get up to 30 Mbps download and 2 to 5 Mbps upload for around \$120 a month. That's 10 to 20 times the speed at roughly a fourth of the cost.

### Broadband Options

There are three options for affordable broadband in your home or office: DSL, cable or fiber optic. If you can't find a provider, your last hope is satellite, but this is only useful for Web surfing and e-mail. Unfortunately, without the heftier bandwidth, hosting Web sites is not in your immediate future. Here are some considerations for each type of service:

#### DSL

A digital subscriber line (DSL) expands the bandwidth over existing phone lines. This is good and bad. Since they are running on copper lines running from the telephone provider's central office (CO), you can rely on your DSL connection to stay up during any wide-area power outages. If you have your own equipment, like your routers and computers sufficiently backed up with an uninterruptible power supply (UPS), you're still in business. The con is that the distance you are away from the CO determines the speed of the line. Check with the DSL provider for the rated speed before you sign up for service. You'll need to be within 2 miles to get the fastest connection.

#### Cable

Due to the distance issue with DSL, cable speeds are generally faster than DSL. Cable is not affected by distance since



### Specs to Consider

As you browse for providers, you'll notice they all feature consumer pricing, which may seem tempting. You will, however, require a business-class account for a couple of reasons. First, you'll want dedicated bandwidth, meaning that, in the case of cable, a neighborhood teen won't sap bandwidth as they download music or video files. Also, if you want to connect your shops and run Web servers and e-mail services, you'll need at least one static internet protocol (IP), which may be included in the price. Several IPs are always extra but you may need them if you want several e-commerce Web sites. Expect to pay around \$100 to \$120 per month for business-class service that delivers around 10-15 Mbps download/2 Mbps upload and a \$5 to \$10 per month extra charge for the static IPs.

— R. S.

providers can adjust and optimize bandwidth frequencies over the coaxial cable running to your house or business. If you don't already have an installed coaxial to your business, you may have to pay for installation, which can come with quite a sticker shock.

Residential cable connectivity can vary, since the line is shared, but business cable customers usually get dedicated bandwidth. (Read more in the sidebar, above.)

#### Fiber Optic

The major player providing fiber optic connections is Verizon, which brands its service as FiOS. Find out about local availability here: [http://en.wikipedia.org/wiki/Verizon\\_FiOS\\_Availability](http://en.wikipedia.org/wiki/Verizon_FiOS_Availability). If you can access FiOS, do it. FiOS delivers the fastest connection with pricing that matches or beats the other two options. Fiber optic cables use light to transmit data upwards of 30 Mbps. Unlike many cable providers, Verizon is willing to absorb any installation fees. In addition, if there is a local power outage, Verizon provides a UPS to power the router it installs at your location.

Installations for most broadband options usually take one to three weeks. The timing should be right, since you'll be receiving the next issue as the installation is complete. At that time, we'll cover all the exciting things you can do with your new, super-fast broadband connection. 🌀

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