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Wireless

CyberLynk's Air system offering high-speed Internet connections at lower cost

When Shorewest Realtors was setting up its new office in Racine earlier this summer, a wired connection for Internet service would have seemed obvious.

But the usual wires aren't there. Nor are the telephone connection charges that come with such wired connections.

Yet the Shorewest office is enjoying high-speed Internet connection, thanks to a new wireless service being offered by Racine-based Internet service provider CyberLynk Network (www.cyberlynk.net), a business located in the same office complex at Washington and Emmertsen avenues on the community's west side.

"It works great," said Kim Casper, sales director for the Shorewest office.

A little dish on a windowsill of the Shorewest office points toward a transmission antenna on a nearby tall building - the David Insurance Centre at 1300 S. Green Bay Rd. That antenna transmits Internet data to Shorewest computers at speeds of up to 1.5Mbps - equivalent to speeds of a full T-1 line, which is considered premium connection service for businesses.

The wireless service is capable of much higher speeds, however - initially up to 3Mbps and then up to 10Mbps, notes Michael Hobach, who founded CyberLynk on 1995.

"The need is definitely there," said Hobach, noting the existence of Internet service providers which are totally wireless. CyberLynk offers the full array of wired connections, and has its own points of presence (POPs) in southeastern Wisconsin, northeastern Illinois and Chicago.

"It's not the answer to everything, but it definitely fits in," added Paul Schumacher, director of corporate sales for CyberLynk.

For Shorewest, the selection of wireless came down to reliability, the availability of a



Racine-based CyberLynk Network owner Mike Hobach shows an antenna that receives a signal for wireless Internet service. The service currently provides connections speeds of 1.5Mbps.

high-speed connection at CyberLynk and cost, said Joe Hornung, IS director for the realty firm.

"We are able to get the speed of a T1 line without the cost," said Hornung. And because there was no line installation, "it allowed us to get up and running in a short amount of time."

For those who want the fast speed, the wireless plan can provide it for a lower cost. The system currently costs about \$1,400 to install, and users pay a monthly fee of \$200 or more, depending on usage. All equipment needed is included in the installation; antenna maintenance is also covered. And what is seen as one of the main advantages is that there is no telephone line connection, thus no connection charges or, as in the case of DSL, no installation frustrations. Still, Hobach noted that "if you can't afford to be down," the price

of the T1 connection might be a wiser investment. By comparison, a full T1 line would cost about \$1,300 to install with charges of \$360 or more per month, depending on usage. Additionally, a T1 line can incur telephone connection charges of \$250 or more per month.

The system has been working well for Shorewest, which uses the Internet connection for the usual Web applications which also handles administrative operations for the office from its main office in Brookfield via a virtual private network.

"The reliability is pretty good," Hornung said. "Real estate is not a 9-5, Monday through Friday business, it's open all the time, we really need to have the system up all the time."

Shorewest had some experience with wireless Internet connections, having its own equipment to provide it at its West Bend office, Hornung noted.

The wireless reception is largely unaffected by weather such as rain and fog, but an ice or snow build-up on the reception dish could affect the signal, Hobach said.

He expects a steady growth in wireless clientele.

CyberLynk has plans to extend the system into other parts of Racine and into Kenosha, Burlington, Union Grove and then into Illinois.

Fixed wireless uses a microwave signal to transmit data; the signal can travel 10 to 16 miles.

And not too far into the future? A satellite will transmit the signals rather than a roof-top antenna, Hobach said. "By next year, such a system may be affordable."

CyberLynk is the only wireless provider in southeastern Wisconsin. In Milwaukee, alpha dot net had provided the service from its downtown Milwaukee office until the company was purchased by PSINet.

Comparing connection options:

Analog dial-up

- Speeds: up to 56Kbps
- Main advantage : low costs; somewhat portable
- Main disadvantage: slow speed

ISDN

- Speeds: 64Kbps per channel; can have two channels for 128Kbps total
- Main advantage: Acceptable speed for offices with up to 30 PCs with light Internet usage
- Main disadvantage: Service is not expandable; per-connect or per-minute costs incurred

Fractional T1 or Full T-1

- Speeds: from 128Kbps on a fractional to 1.5Mbps on a full T-1
- Main advantage: high speed with top reliability
- Main disadvantage: more expensive than other connection options

DSL

- Speeds: from 128Kbps to 7Mbps, depending on geographic availability
- Main advantage: high speed for low price
- Main disadvantage: geographic limitations of service; possible stability/installation problems

Wireless

- Speeds: from 256Kbps to 10Mbps
- Main advantage: high speed with lower price; and no telephone connection needed
- Main disadvantage: User's antenna must be in line-of-sight of provider's wireless cell site

Source: CyberLynk Network, Inc., Racine