

Confidence in Transition



High-Speed Links Keep Telephone Offices Connected

Runestone Telephone Association has provided telephone service to ten west central Minnesota communities for 50 years. In 1993 they added cable television service for about 12 communities, and in 1996 they expanded to provide Internet connection to more than twenty towns.

To service the added lines and customers, Runestone continually replaces outdated equipment with new technology. This included replacing the region's copper infrastructure with fiber optic cable for increased speed and reliability. It also meant creating a high-speed link between the company's main offices so employees could better service the increasingly sophisticated needs of their expanding client base.

Dialing-up with fast Internet Connection

Their first project was to connect the business office's Ethernet network to the telephone equipment and Internet point-of-presence (POP) located in the telephone office less than one mile away. They had been using modems but wanted to take advantage of the speed the fiber between the two buildings provided.

"The traditional methods of providing high-speed connections are expensive – even if you are the telephone company," said Clay Drews, Internet manager for Runestone. "We wanted to keep our existing networks in place and had already run the fiber between buildings. We needed a solution that took advantage of the fiber's speed and gave good bandwidth."

Drews and his group started researching available products including Transition Networks media converters. Their goal was to find a solution that was easy to install, inexpensive and reliable. What they found were the Transition Networks 10BASE-T to 10BASE-FL Media Converters.

"Using traditional telephone methods like a T1 line, the fastest we can go is 1.5 mbits per second. With the Transition converters, we reach 10 mbits per second at a fraction of the price," said Drews. "We ended up with a higher speed connection at a much lower cost."

Because the first application was installed easily and ran smoothly, Runestone staff wanted to create another high-speed link between the two buildings. This connection provided business office personnel with access to telephone switch equipment in the telephone office. Using two more fiber strands and a pair of Transition 10BASE-T to 10BASE-FL converters, Drews and his staff easily got the job done.

"As Runestone continues to expand, I know that we can use Transition Networks converters to keep us connected quickly, transparently and economically."

Clay Drews, Internet manager, Runestone Telephone Association

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The reaction from staff members has been outstanding. Drews believes that personnel enjoy both the direct connection and the speed with which they can send large documents. "This is really important when we are sending AutoCAD drawings or large spreadsheets. We used to wait 15 or more minutes for the files to be sent, now we can do it in only a minute or two," Drews explained.

Moving Forward with New High-Speed Links

In the near future Runestone will provide its customers with cable/modem Internet service from the cable television head end. To do that, the company will connect the Internet POP at the telephone office to a remote head end about eight miles away. Using the fiber that is already in place and Transition 100BASE-TX to 100BASE-FX converters, they will provide fast Ethernet connection at a low cost.

"With Transition, we take advantage of the fiber to optimize performance at a price we can handle," Drews said. "As Runestone continues to expand, I know we can use Transition Networks converters to keep us connected quickly, transparently and economically."

Transition Provides...

**Transparent
high-speed
connection
between offices**

Low-cost solution

**Optimum
performance using
existing equipment**



Worldwide Headquarters
6475 City West Parkway
Minneapolis, MN 55344 USA

tel: 952.941.7600
toll free tel: 800.526.9267
fax: 952.941.2322
info@transition.com
www.transition.com

EMEA Headquarters
tel +420 2 2426 6901
fax +420 2 2426 6854

Germany
tel: +49 611 974 8460
fax: +852 2389 7178

Mainland China
tel: +86 10 67136457
fax: +86 10 67136459

UK
tel: +44 1635 40289
fax: +44 1635 40289