

McNEILUS STEEL

Steel Supplier Survives Severed Communications Cable with Perle 594e Remote Controller



Disaster can take many forms in today's world, from fire and flood to earthquakes and hurricanes. It can even be as mundane as a backhoe ripping up a company's communications network. But regardless of the cause, fixing the problem as quickly as possible is critical, especially when your business depends upon real-time access to information.

Based in Dodge Center, Minnesota, McNeilus Steel specializes in next-day delivery of new and scrap steel and related products to small and medium-sized customers within a 150-mile radius of its facilities. It ships 1.5 million pounds of steel each day, a sizeable portion of which is sold directly to - and carried away immediately by - customers at its adjoining retail store.

Since starting operations peddling scrap steel from a single truck in 1948, the company has grown to a staff of 230 and annual sales of \$80 million. McNeilus uses both telemarketing and its retail store, in separate buildings, to drive sales, primarily of new steel that it buys in large quantities from steel mills. The store sells everything from single bars of steel to small truckloads of metal cut to order. Customers are typically farmers and garages with immediate requirements.

Speedy Access To Inventory And Pricing

Sales are brisk at McNeilus, causing product inventories and prices to change on a minute-by-minute basis. "Real-time access to current information is essential to enable us to service our customers," said Bob Klapperich, the company's MIS manager.

The company deploys an IBM AS/400 as its central corporate server. To access inventory and pricing information on a real-time basis, it used underground Twinax cables to connect the terminals at its retail store to the AS/400.

When construction of a new building on McNeilus' premises severed the store's links to the main computer, the retail operation was crippled. "Our adventure began when an underground cable that connected one of our remote buildings to our AS/400 in the central office building was cut during a construction project," said Klapperich. "By the time the break was identified and a general location pinpointed, the area was already covered in new concrete and repairing the cable became unrealistic."

Klapperich launched a search to find a new way to get the main retail sales store back online. "A solution had to be found that was not only practical, but quick to implement," he said. "The cable crosses a public street, so we knew that laying a new cable would be expensive," he said. There were other projects planned in the near future, such as

expansion of the driveway that leads to the new building, which meant a new cable would be at risk of getting cut again. So, burying a new cable was therefore not a viable option.

Working with McNeilus IT supplier, Armac Computer of Burnsville, Minnesota, Klapperich looked at several networking options, including a traditional dial-up solution. This would require installing a remote Perle 594 Controller at the retail building, which would dial up an asynchronous controller attached to the headquarter's AS/400. It also would involve shutting down the AS/400 to install a card, that that made the MIS manager nervous because there was no guarantee that he could bring the server back up quickly. And, he couldn't even be sure the configuration would work the first time around.

As this installation would take place during business hours and would affect other retail locations that were still online, Klapperich didn't feel comfortable with this solution. "Our inside sales people take orders almost continuously during business hours. Many customers wait until they need something before they call us, and know we can deliver it the next day. If we suddenly cannot guarantee delivery the next day, there is a good chance they will call a competitor. Therefore, minimizing downtime on the AS/400 is quite important. That is why I didn't care for this solution," Klapperich said.

Theoretical Solution The Optimal Choice

After doing more research and talking to its supplier, Perle Systems, Armac came back with a viable alternative - and one that would open the door to future e-commerce applications for McNeilus. Armac suggested using one Perle controller at each location and connecting the two via a telephone line. This would enable the retail operation and the AS/400 to communicate seamlessly through dial-in access, and it would be self-supporting, as the Perle 594e installed with the AS/400 could wait unsupervised for an automatic call from the Perle 594T controller installed in the retail store. Even after a power outage, the system would automatically redial itself.

According to Armac, this had never been tried before, but Perle assured the company that it would work. "Based on our past experience with the company's products, I decided to go with that option," Klapperich said.

From start to finish, the entire process only took a couple of days, with minimal disruption to sales and service. The telephone company came in and put in a new line. The Perle controllers were installed in the retail outlet and the central office, and Perle's technical support personnel configured the controllers to talk to each other.

"Because these units had never been installed in this type of situation before, each time I presented a new concern or error code, Perle had to go back to the lab to experiment and devise a solution," Klapperich said. "They really went the extra mile. Once configured, we've found the setup to be foolproof. While we're using only an inexpensive telephone dial-up service, performance and reliability have been excellent, and we've been happy."

In the event McNeilus decides to add new devices at the retail store, such as PCs or smart terminals, or upgrade or replace its AS/400 at the corporate facility, the Perle 594-based solution will continue to meet the company's needs. This solution also provides flexibility for expanding company's computer capabilities in the future, Klapperich said.