Summit Electric and Smart Data Management

By Win Quigley

The heart and soul of business computing is data: managing it, storing it, accessing it, moving it, analyzing it, mining it for all the value it contains. When one speaks of enterprise level computing, one is speaking about a whole lot of data.

PRO/5® and Visual PRO/5® with their multikeyed MKEYED file system are enterprise-level data environments. The introduction of 64-bit file addresses in Revision 3.0, which enables file sizes to become enormous, is not a minute too soon. Several BASIS developers are finding their customers are blowing past the former 4-GB limit. One PRO/5 end user in the health care industry updates 250,000 records a day, performing 17,000 physical reads and 5 million logical reads. From 400 to 500 users can be working on the file system at a time.

A data-intensive market in which BASIS products have a strong presence is the warehousing and distribution industry. Here, data can mean the difference between profit and bankruptcy, according to Kurt Williams, Director of Information Technology at Summit Electric Supply Company, Inc., with headquarters in Albuquerque, New Mexico. Summit has used BASIS software for more than a decade.

Summit generates $120 million in sales per year from 10 warehousing and sales locations in Texas, New Mexico and Arizona. Summit sells electrical supplies, from parking-lot lighting fixtures to conduit. Among its approximately 9,000 customers are electrical contractors, organizations with large maintenance and repair needs, such as Los Alamos National Laboratory, and OEMs who buy electrical parts to incorporate them into their own products for resale.

All remote locations connect to the central data facility in Albuquerque via a wide-area frame relay network. More than 350 users will be on the computer system at peak times. Kurt says that with PRO/5 running on IBM RS/6000 H70 machines, performance is excellent.

Summit is in a very competitive industry. Pricing, therefore, is always under pressure. The supplier who wins in this business is the one who can provide the best service while keeping its costs under tight rein. "The quality of service is very dependent on the quality of information management," Kurt says.

"We're a distributor. We buy from manufacturers in large quantities and sell to customers in smaller quantities. The transaction cost is critical. We have to do everything we can to drive transaction cost down. Automating all phases of procurement and sales, order entry and delivery are critical to keeping transaction costs down."

The need to control costs must be balanced with the need to be sure the customer gets what he needs quickly and accurately at the same time Summit keeps its own inventory to an absolute minimum. There are about 1 million parts a customer might order. Summit keeps about 60,000 on hand. The question is, which 60,000 do you keep?

The answer is in the data. Summit has 40 GB of data in a system that can hold 50 GB. Kurt expects to fill the remaining 10 GB this year.

"Transaction cost control is important, but we must keep inventory levels as low as possible but still be able to meet customer need without hurting quality of service. We don't want any more money tied up in inventory than is absolutely necessary," Kurt explains.

Failure to have the right part at the right time costs Summit in another way. Several of its largest customers have "fill rate" contracts, which means Summit has to meet customer requirements at least 98 percent of the time or pay financial penalties.

To meet this challenge, Summit keeps two years of history - approximately 3.4 million records in multikeyed MKEYED file format - that is used to evaluate purchasing patterns and trends. Summit manages to keep what is needed and only what is needed on hand.

"Graybar is the largest electrical distributor. They do some of the same things we do. But Summit keeps its competitive advantage by having exactly what the customers want when they want it," Kurt says. "The only way we can do it is through proper use of technology. If we did it by hand we couldn't compete."

The result is profits. Summit compares its performance against industry-standard metrics, including profit margins. While Kurt can't release specific numbers, he does say, "We do exceed industry averages comfortably."

Handling transaction costs is another sort of challenge. Summit strives to automate as much of the transaction as possible.

"We start on the procurement side. In the old days (even now sometimes) our orders were given on phone or faxed into manufacturers," Kurt says. "They'd key it into their computer system, ship to us, we'd receive, we'd key it into our computer system." Now Summit and its manufacturers automate ordering and fulfillment with electronic data interchange (EDI) systems. The Summit purchasing system delivers its orders as an electronic file directly into the manufacturer's system. The manufacturer's shipping notice and order verification are transferred back to Summit in EDI format. "The only human intervention required is that when an order is received, you check it off. All the data we need are already in computer."

With certain suppliers and customers, transactions occur with no human knowledge at all. By tracking data, purchasing patterns and stocking levels, and by applying previously agreed-upon parameters, the Summit computer system will notify selected manufacturers of the

day's need for inventory. The vendor's system automatically places an order and directs shipping of material the same day. Summit does the same for its larger customers. Computers communicating to each other via EDI automatically place orders and ship inventory from Summit's stock.

Human beings are freed to manage the business, evaluate the competition, sell product and support customers.

The next step for Summit is Web-based electronic business, and, of course, more data and more profits.