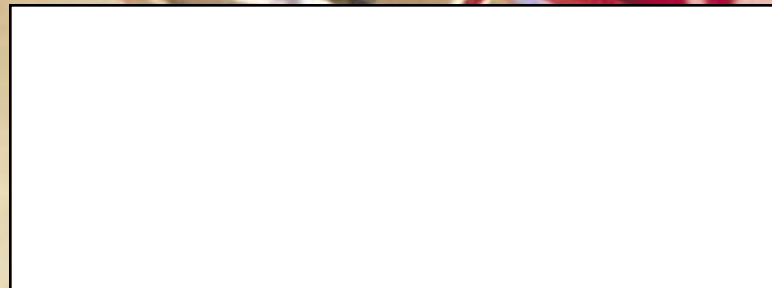




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GUARDIANS OF DATA

NORLIGHT TELECOMMUNICATIONS: VOLUME FIVE, NUMBER THREE - SEPTEMBER 2001

THE GUARDIANS DO WHAT OTHER TELECOMS CAN'T.

Case History: Bay Area Medical Center



Growing from a small-town hospital to a regional medical center can be exciting, expensive and time-consuming. Ever try it? Well, trust us, it can be.

Just ask Bay Area Medical Center (BAMC). Since their formation in 1985, they have grown into a regional medical center. BAMC attracts patients from NE Wisconsin and Michigan's Upper Peninsula, and have recently built a new \$16.46 million outpatient surgery center in Marinette, WI.

BAMC was formed as the result of a 1985 merger of Marinette General Hospital, Marinette, WI and Menominee County Lloyd Hospital, Menominee, MI. BAMC employs over 700 people.

Through a joint venture called NorthReach, BAMC and Bellin Health System of Green Bay own 12 clinics throughout Northeastern Wisconsin and Upper Michigan. In 1997, BAMC acquired Oconto Memorial Hospital and is currently arranging financing to construct a new \$17 million hospital in Oconto.

Growth and expansion like this can translate into more resources and better health care for a community. It can also mean huge headaches for an organization's network. Luckily, BAMC had the Guardians of Data on their side to help soothe most of those headaches. It wasn't as easy as taking two aspirins and calling us

in the morning, but we prescribed a solution that fit right in with their needs.

BAMC started out using a dial-up connection from a local-provider for their employees to access the Internet and e-mail. However, as they grew in size and needed network connectivity to other partner facilities, they decided to beef up their telecom services. That's when they called in Norlight account executive, Scott Hribernik.

In the fall of 1999, BAMC met with

"Most said they couldn't do it the way we wanted. Norlight said they could do it and gave me names of other customers that had similar frame relay environments."

Hribernik and fellow Guardians Joe Schorr, Frank Beider and Mike Tenpas. They discussed an Internet access and frame relay solution that could cost-effectively connect BAMC's partner facilities and that would meet BAMC's current and future demands. BAMC had an idea of the type of frame relay network they were looking for; their only problem was finding a service provider that could accommodate their request.

"The frame relay scenario we proposed was not well received by other service providers," said John Beyer, BAMC's network engineer. "Most said they couldn't do it the way we wanted. Norlight said they could do it and gave me names of other customers that had similar frame relay environments."

Known for handcrafted solutions, Norlight was not only willing to set up BAMC's custom frame relay request, but also helped control costs by

managing their hardware. BAMC wanted a provider to support the hardware so they wouldn't have to add WAN specialists to their staff. In a battle of hard to pronounce names, Hribernik worked with Norlight product manager Mark Wojnowiak to remedy this. Coincidentally, Wojnowiak had just introduced Norlight's new managed router service. Norlight now provides this service to BAMC as well as many other customers.

"I think one of Norlight's biggest benefits over our competition is our ability and willingness to

create custom, handcrafted solutions for customers," said Hribernik. "When I was working with BAMC, I knew there had to be a way to design the network the way they wanted it. It took a little work, but once it was ready it was as effective and adaptable as they had envisioned."

In other words, the Guardians do what other telecoms can't.

Got a frame relay request that's seems impossible? Try one of our handcrafted solutions. Need to reduce your reliance on in-house expertise? Try our managed services. Need something for that migraine? Try Bay Area Medical Center.

Unless, of course, the migraine is caused by the stress of finding the right network solution; in that case, we'd be happy to take a look at it.

It can't hurt to call.



DSL HELL

The decline of DLEC's doesn't mean the decline of DSL.

Remember the dark ages, when digital subscriber lines (DSL) were hot? Every telecom company under the sun was trying to get a piece of the action. Lead by the "big three" data local exchange carriers (DLECs), Covad, Rhythms NetConnections, and NorthPoint, a good number of companies arrived on the scene in the late 90's and early into 2000 looking to cash in on DSL. Most of these companies were betting on one thing: they would be the companies to satisfy the SMB (small and medium business) markets' insatiable need for bandwidth.

The business plans of most DLEC's were basically the same. Simply put, they would provide high-speed Internet access over DSL to the SMB market. This plan, however, caused problems and the eventual decline of the DLECs. One of their most prevalent problems was the DSL technology itself. Problems with the technology became so common it earned the service a new nickname: "DSL Hell."

When the big three hit the telecom scene they had a new service and a different type of business model. It was at a time when consumers and business were past the initial excitement of the Internet and were looking for an alternative to slow-speed connections. Since DLEC's main competitors, the incumbent local exchange carriers (ILECs), were slow to roll out DSL the big three were welcomed with open arms by investors and customers.

"It has it's problems, but DSL is not a dead technology," said Bernie Rosen, Norlight's vice president of marketing. "A lot of the problems with DSL arose from the use of the old copper wires and the direct conflict of interest between the DLECs and ILECs. Also, any carrier that sells DSL shouldn't rely on it as their sole revenue source, but should diversify their service offering with other transport options."

Since DSL runs over standard copper phone lines, it can have line degradation and interference. In addition, the ILECs, who are the DLECs' direct competitors, own most of the copper lines in the U.S. In order to provision new

customers, the DLECs have to go through the ILECs and, since the two were in direct competition, the ILECs weren't in any hurry to help them out. This caused delays in service, payments and revenue for the DLECs, and eventually hurt the reputation of DSL.

In addition to the problems with DSL, the DLECs faced another problem; their business model was limited to one service and one technology — high-speed Internet access via DSL. Most of the DLECs planned on additional value-added services once their network builds were complete, however, this depended on sufficient demand for high-speed access during this capital-intensive period. Unfortunately for the DLECs, the expected demand wasn't entirely there.

There is unmet demand in the SMB market. However, SMBs are not ready to jump from cheap dial-up connections to high-speed Internet access costing \$100 to \$500 a pop. The SMB market didn't have a valid reason to switch to DSL and the DLECs — overestimating the demand — didn't give them one. Since the DLECs based their whole business model on selling high-speed Internet access, they had nothing more of value to offer the SMBs and couldn't support their network builds.

Norlight's approach to DSL has been a cautious one. When all the hype about DSL was taking place in the late 90's, Norlight was evaluating the technology and watching the market. Even though the DLECs weren't able to stay afloat in the DSL world, there is still a large demand for DSL and Norlight is strongly considering offering DSL to our business customers. However, Norlight's business model differs from that of the DLECs in that we have the services available to offer a total package to our customers.

Let us know what you're thinking. Would you be interested in the benefits of DSL service if we choose to add it to our product mix? How would your business use DSL? Contact Bernie Rosen by e-mail at bjr@norlight.com and let him know your thoughts.

"It has it's problems, but DSL is not a dead technology."

FASTER AND MORE AFFORDABLE?
IT'S THE AMAZING ATM.

Norlight's ATM can reduce your costs while offering higher speeds and customized Classes of Service.

Everyone has their priorities in life. You go to work to earn a living. You pay your bills on time to avoid those rude bill collectors. And you have to come up with that killer network solution that will make your boss happy and your life easier.

Well, when priorities are at stake, call on the Guardians of Data and their newest transport solution, ATM (Asynchronous Transfer Mode).

ATM is so amazing, it will make every priority in your life easier. Okay, at least the ones related to your network solution. But if things are going well with your network, all is right with the world. ATM will prioritize your traffic, making it possible to send voice, video and data over the same network with guaranteed Qualities of Service.

Norlight offers four different Classes of Service for ATM that allows customers to prioritize their data accordingly. "Because of its various Classes of Service, ATM can consolidate multiple networks for multiple applications and reduce the number of access lines," said Virginie Lemoine, Norlight's product manager.

"ATM uses fixed cell size, which requires less processing of the cells and makes ATM a faster transport medium than variable cell size transport methods."

Through ATM's Classes of Service, voice and video have a more constant transmission while regular data traffic is more "burstable." Voice and video need the constant transmission so there is no interruption in their broadcast quality. In contrast, sending data in larger blocks makes for more efficient downloads of large files.

To sum it up, Norlight's ATM can reduce your costs while offering higher speeds and customized Classes of Service. You get prioritized data, a single network solution and faster speeds.

What's your priority — an old sluggish network or a shiny new, high-speed ATM network? Don't think too hard — just give the Guardians of Data a call.

Tell 'em ATM sent 'ya.

GUARDIANSHIP:
IT'S IN THE
DETAILS.

As the Guardians of Data, Norlight vows to watch over your most precious commodity, your data. We offer you the latest in integrated data communications solutions, and our employee-owners make it their priority to satisfy your networking needs.

Sometimes though, it's the little things that count. Little things like making enhancements to our already existing products. Such is the case with our dial-up Internet product.

Norlight has worked hard to decrease the turn-up time for dial-up accounts from ten business days to five. Another significant enhancement the Guardians have accomplished is the placement of our dial-up POP list on our Customer Care Web site. You can find the list by pointing your browser to cc.norlight.com, going under product support and clicking on dial-up.

Enjoy the enhancements.



Norlight
TELECOMMUNICATIONS

Now in its 30th year of business, Norlight Telecommunications is proud to serve as the Guardians of Data for Midwestern businesses. We are a subsidiary of Journal Communications, Inc.

Employee-owned since 1937, the company has operations in television and radio broadcasting, newspaper publishing, database marketing, printing and telecommunications.

If you have a question, comment or suggestion regarding this publication, please contact Greg Quigley at Norlight, 1-877-456-5055 or visit us at www.norlight.com.