



# GROWING GAINS

When last we visited Life Time Fitness, its IT staff was being tasked with powering growth on a standstill budget. The approach: New data centers for flexibility, and VoIP for PBX savings. *BY DAVID JOACHIM*

» Life Time Fitness has coast-to-coast ambitions. Well established in its base markets of Minnesota, Illinois and Michigan, the company wants to add six or more clubs per year, tripling its number of facilities by 2010 and challenging competitors in Arizona and Texas. The technology implications are significant, and CIO Brent Zempel has been forced to rethink the company's network topology with two sometimes contradictory goals in mind.

On one hand, applications such as the company's homegrown Member Management System (MMS)—a group of software modules based on Sun Microsystems' J2EE and Java that support registration, authorization and usage tracking of the company's member base—should ideally be centralized at Life Time's Eden Prairie, Minn., headquarters. This allows all members to be authenticated from the main database, thus reducing the potential for fraud. However, as club locations spread across the country, the need to become less reliant on HQ—a single point of failure—is undeniable.

"If corporate went down today, MMS would be inaccessible," says senior network architect Brad Clark.

The IT staff speaks from experience. Last year, con-

struction crews cut Life Time's copper lines six times, killing connectivity for as long as half a day each time. And Qwest's central office has a tendency to flood in the spring and fall seasons, draining Life Time of all voice and data connectivity, says Rob Mendel, director of Life Time's IT operations.

To boost redundancy and performance, Life Time is building a data center in Chicago that will host MMS and distribute it to nearby clubs via dedicated, point-to-point T1 lines (see "Future Network Topology," on page 92). A DS-3 link will connect the Chicago collocation facility to headquarters, and member data will be replicated regularly, though IT hasn't decided how often. Life Time evaluated 18 hosting providers and has narrowed the decision to AT&T or Sprint, Zempel says.

Life Time's Schaumburg, Ill., center is a quasihub for the Chicago region, terminating connections but not housing applications or data. It connects to the clubs via a shared 256-

Kbps frame relay link rather than T1s, Clark says, making connection speeds less than blazing. A dial-up ISDN line from Ameritech serves as a backup.

The data center and links will be in place by year's end. Next will be Michigan's five clubs, which will take on the



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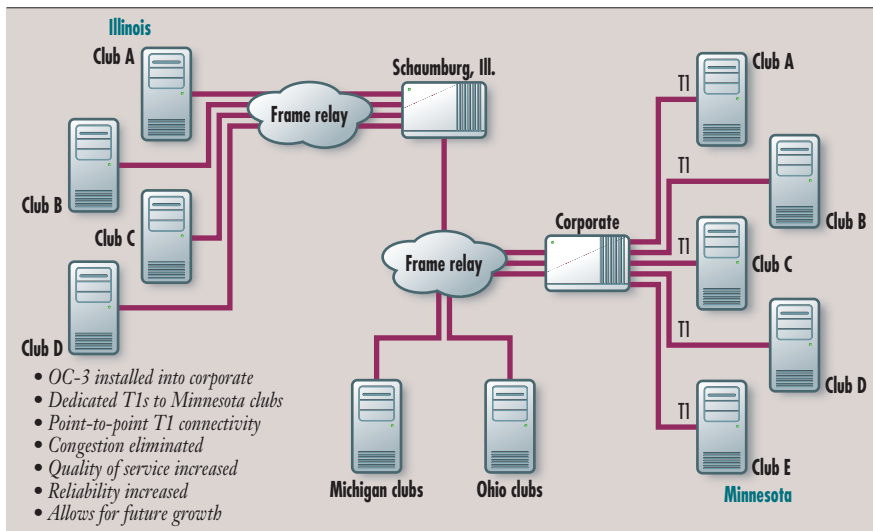
**ON LOCATION**  
**AT LIFE TIME FITNESS**

same architecture by the end of first quarter 2003.

Because Life Time has few clubs in Indiana, Ohio, Virginia and Arizona, those sites will have a different architecture. They will rely on the public Internet, secured via VPNs, replacing the expensive point-to-point T1s that connect them back to headquarters today, Clark says. Relying on the Internet for vital business links without serious SLAs is arguably a risky business decision. However, a dedicated 256-Kbps connection from Tempe, Ariz., to Eden Prairie would cost about \$2,500 per month, Clark says. Ultimately, Life Time expects these regions to have enough clubs to warrant a hub architecture similar to the Chicago one.

Thanks to the Michigan and Chicago hubs, headquarters was able to upgrade from frame relay to an OC-3 pipe split into three DS-3s, reducing monthly service costs 21 percent, to \$4,800, and increasing bandwidth six-fold. This setup makes the architecture more scalable; the company plans an upgrade to OC-12 by second quarter next year.

**CURRENT NETWORK TOPOLOGY**

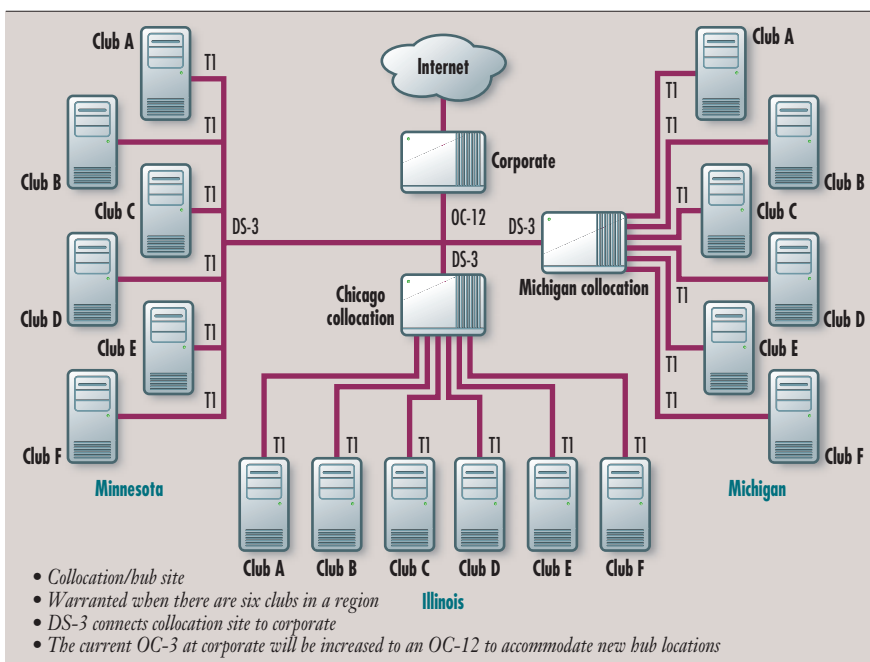


Life Time also replaced the copper wires in Eden Prairie with two fiber optic connections, each originating from a different switch and linked to a separate central office for redundancy. The company negotiated a deal to avoid an up-front charge of about \$20,000 for running the fiber by having Qwest amortize the cost into monthly payments, which run about \$3,500.

The new architecture—which Clark calls a “distributed hub and spoke”—affords Life Time more options at the edge while maintaining a reliable core.

“The end points are flexible in that we can use whatever technology makes sense at the time of deployment, but the core will be dedicated leased lines and high bandwidth,” Clark says. Flexibility is key because adding six new clubs per year requires setting up six additional temporary sites with full connectivity back to headquarters. That’s because about half a year before a new club opens, Life Time sets up shop in a triple-wide trailer to sell preopening memberships. Each temporary office needs a dedicated frame relay connection and at least a dozen phone lines.

**FUTURE NETWORK TOPOLOGY**



**SAVINGS VIA VOIP**

Life Time is deploying IP telephony in all new locations, eliminating the need for traditional PBXs—a savings of about \$240,000 per year for six new clubs, Mendel says. Life Time uses Cisco’s CallManager with consulting from network integrator Enventis (for our Sneak Preview of CallManager, go to [www.nwc.com/1220/1220sp2.html](http://www.nwc.com/1220/1220sp2.html)). There are some 250 IP phones in use in Eden Prairie, where users enjoy integrated voice- and e-mail. A central database makes it possible to identify a caller immediately and have his or her record pop up on screen. As sites add IP telephony, Life Time may incorporate “follow the sun” call center management, in which calls can be routed to other regions during off-hours. However, Mendel says concerns about



VoIP's quality and reliability make him reluctant to roll it out enterprisewide. Instead, he's running a mix of analog and IP equipment. IP calls are currently routed over frame relay lines. As locations are added, Life Time will keep a close watch on quality and focus on SLAs.

"We would like to see [IP telephony] become more stable," he says. "It's better than it was two years ago, but it will be even better two years from now."

## MORE WITH THE SAME

Even as Life Time takes control of its network, it's increasingly eyeing outsourcing. CEO Bahram Akradi has capped IT staffing and budgets at current levels for the foreseeable future. "We have to be smarter as we grow to 75 sites to figure out an appropriate mix of outsource vs. insource," Mendel says. However, Mendel and Clark are confident they can operate at least two data centers, in Chicago and Texas, by training IT employees already deployed in those regions to manage the data centers. And the move to OC-3 and eventually OC-12 will give Life

Time enough bandwidth for VoIP as well as videoconferencing and e-learning, Clark says. "We're striving to build a multiservice network." **NC**

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## ONLINE SPECIAL

Visit our On Location At Life Time Fitness daily blog at [radio.weblogs.com/0104684/categories/lifetimefitness/](http://radio.weblogs.com/0104684/categories/lifetimefitness/). You'll find chats, time lines and links to all our Life Time coverage.

# CRM, ONLINE SCHEDULING HIT SNAGS

Converting client/server applications to a Web interface should simplify things. But when Life Time deployed a pilot of Siebel Systems' CRM suite it discovered a conflict: Siebel 7 Service Pack 2 prefers version 5.5 of Microsoft Internet Explorer, but Life Time's Member Management System was designed for version 5.0 of the browser. And although you can tap into Siebel 7 using Netscape, you'll lose the richness of the ActiveX controls, Life Time CIO Brent Zempel says. ActiveX controls account for roughly 90 percent of the browser functionality in Siebel 7.

The fix: Life Time's developers spent weeks updating MMS, then testing both applications for IE 5.5 compatibility. Tests are ongoing. The goal is to create enough parity so users don't have to juggle multiple browser versions. "It's a case where one application forces all other Web apps to be compatible with a specific environment," Zempel says—and, we would add, an argument for Java.

"Siebel hasn't been playing real well with our other apps," Zempel says, "so we had to make some tweaks."

The scramble may be for naught, however, if Life Time doesn't follow through with Siebel. Life Time execs were mulling over that decision as we went to press. "We're going to finish the pilot and then figure out if we want to keep Siebel," Zempel says.

Life Time has outsourced testing and implementation to Surebridge Corp., a systems integrator. When asked about the decision to outsource, Life Time said it didn't have the resources to run the pilot in-house because the Siebel time line was aggressive and IT was focusing on other high-priority projects. Outsourcing was the only way to meet the deadline.

Zempel wouldn't say how much Life Time paid Surebridge for the pilot test, but he noted that Siebel helped negotiate a "discounted rate." He acknowledges that management "wouldn't be terribly happy" about the lost time and money in the event that Life Time doesn't ultimately choose Siebel. That said, he is "pretty certain" Life Time will use Siebel, at least for sales-force automation.

"We may use other products to round out our CRM suite," he says. "The route we're choosing is best of breed with app integration."

The relationship between Life Time and its facilities-scheduling ASP, Xtime, also appears to be cooling. Despite a successful Web services deployment to connect MMS to the online scheduling application, Life Time halted the scheduling pilot midway through the test phase because it was clear that Xtime's applications couldn't scale to 26 clubs and 400,000 members. Among the alternatives: Sun's Calendaring Server, which would require a good deal of customization, or an entirely homegrown system.

Life Time could even forgo online scheduling for the near term, says Wesley Bertch, director of software systems. The question is whether online scheduling can create enough returns to justify cost.

"The top guys are now asking the question: 'Is this the most important thing we could be working on?'" Bertch says. "Suddenly, we're not in a big hurry to make this happen."

In other news, the telecom and network operations groups consolidated into one operations group, and in the process, Jud McKee, director of network operations, left the company. Rob Mendel, director of IT operations, now runs the group.