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Case Study

GRICtraveler™ Corporate Remote Access



*Xicor, Inc. Effectively Utilizes GRIC for
Worldwide Remote Access*

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Xicor, Inc. (www.xicor.com) designs, develops, manufactures and sells nonvolatile in-the-system programmable products that retain information even when the system is turned off or power is inadvertently lost. Xicor's broad product line of programmable mixed signal devices include digitally controlled potentiometers (XDCPs), programmable analog products, system management and power management ICs, and secure and standard memory ICs. The company is headquartered in Milpitas, California, and operates globally with sales offices and manufacturing partnerships at strategic worldwide locations.

Like most high-technology companies, Xicor needed to level the playing field against its entrenched competitors. The company desired the competitive edge afforded by advanced Information Technology (IT) resources and applications, but lacked both the funding and the staffing to implement a private enterprise network worldwide. So Xicor aggressively thought outside the box in its search for a worldwide remote access solution.

Xicor's "Anywhere Enterprise" VPN

Although Xicor's application involved relatively few users, its IT needs were every bit as demanding as those found in the largest multinational corporations. The users, who traveled globally and frequently, needed to be in touch—any time, any place and for any application.

Renato Siljeg, Xicor's Manager of IT Infrastructure, realized that an Internet-based virtual private network (VPN) was the ideal solution. But even with a VPN, Xicor was faced with extremely high long-distance charges from traveling employees dialing into their not-always-local Internet Service Provider (ISP). In effect, what Xicor needed was a service provider that could furnish *remote* access capability for its VPN. Ideally, one that was available anywhere in the world with a *local* telephone call.

There were only two possibilities for Xicor's "Anywhere Enterprise" VPN: A single service provider with a global presence, or a roaming arrangement among multiple ISPs. The first alternative was quickly eliminated when it was discovered that the points of presence (POPs) of the so-called global providers lacked the global coverage required by Xicor's frequent flier destinations, especially in Asia.

Internet Roaming to the Rescue

Roaming in the context of an Internet-based VPN is similar, at least in concept, to roaming on a cell phone—but with a totally different cost structure. The goal of Internet roaming is to place a *local* call to a *local* POP anywhere in the world—and to pay a relatively low cost for this service. The per-minute roaming fee is about the same as a domestic long-distance charge, and being local, users invariably receive better connections with less noise, more bandwidth and greater reliability. World travelers benefit even more with the same performance and dependability enjoyed domestically, but at a substantial cost-savings because the Internet roaming fee is fixed at one low rate internationally.

Knowing that all roaming solutions were not created equally, Renato distilled Xicor's full set of needs down to four criteria for evaluating prospective solutions:

- Member POPs must cover the globe with no voids in the numerous regions essential to Xicor's operations, especially in Asia where customers and partners abound, but Internet POPs are few and far between.
- The user interface had to be intuitive, fairly transparent and utterly foolproof because Xicor's strategy was not to staff a Help Desk with 7x24x365 coverage.
- The system had to be easy to install, operate, upgrade and maintain.
- Finally, the per-minute roaming charges had to be competitive. Xicor set a maximum price target of 15 cents/minute—roughly the cost of the company's domestic long-distance carrier at the time.

GRIC: The Obvious Pick

Based on these criteria, Renato's decision was surprisingly easy. Only one solution, GRICtraveler from GRIC Communications, Inc. offered the availability, simplicity, manageability and affordability Xicor needed to implement its Anywhere Enterprise VPN.

The GRICtraveler solution has three key elements: the GRICdial™ client, the GRIC Alliance Network™ of ISPs, and special servers to administer security and accounting. In the spirit of low-cost global roaming, GRICtraveler offers substantial cost savings beginning with the GRICdial client software, which is available at no charge and can be downloaded on-line. GRICdial's intuitive simplicity makes users immediately productive without costly training and minimal on-going support. And because GRICdial is fully compatible with client PCs, servers and applications, there is no need to upgrade or reconfigure any systems or software.

The GRIC Alliance Network is a consortium of ISPs who support the GRICtraveler solution. Currently, the Alliance counts more than 4,000 POPs (the majority of which are outside the US) representing 400 top-tier ISPs in more than 150 countries, giving GRIC users access to a local POP—with a low-cost local call—from virtually everywhere in the world. No other solution, whether from any other consortium or from any global provider, has an international footprint as large as GRIC's.

The GRICtraveler corporate remote access service is based on the innovative GRIC Convergent Services Platform™ (GRIC CSP™). GRIC CSP handles user authentication, authorization and accounting functions for all Alliance members and all enterprise customers. The enterprise portion of the software installs readily on a standard server at the customer premises, and communicates with corresponding GRIC CSP servers operated by member ISPs.

The distributed design employed by GRIC CSP gives the enterprise full control over all security provisions. Use of industry-standard authentication and authorization protocols balances simplicity of operation with ironclad protection. Network administrators simply assign each user a unique ID, a password and a set of access privileges. Whenever a user attempts to log-on anywhere in the world, a server operated by the local ISP forwards the request securely and transparently to the user profile database at the designated enterprise server, which replies either by granting or by denying access.

In addition to performing log-on security, the distributed servers also track usage by each and every user. A centralized server, operated by GRIC, then produces settlement reports that consolidate and delineate usage by all users at every enterprise account. In this way, the enterprise gets a single invoice regardless of how many ISPs are involved.

The entire GRICtraveler solution, including the GRICdial client and the GRIC Alliance Network, is fully supported by GRIC's three 24x7x365 network operations centers (NOCs). These NOCs are located in North America, Europe and Asia. Service providers and enterprise IT Managers alike have access around-the-clock to GRIC's Help Desk support and Web-based trouble ticket tracking system.

The Results

Renato easily got GRICtraveler and Xicor's Anywhere Enterprise VPN up and running in just one week: "GRIC's dialer is incredibly easy to install and use. Unlike other roaming solutions that require a CD-ROM, the GRICdial client can be downloaded easily, and its phonebook is updated automatically whenever a user logs on. GRIC makes my job easy, and because the client is so simple and dependable, our users absolutely love it."

GRICtraveler consistently wins praise for its utter simplicity during the client log-on process. The user is presented with a simple two-step menu for, first, specifying the present location and, second, selecting from a short list of local access numbers displayed. Once connected to the Internet, the dialer automatically launches the VPN client for a secure connection to the corporate intranet, giving users full and transparent access to Xicor's many internal applications—just as if they were at the office. Users are even able to work "off-line" in Lotus® Notes™ to minimize log-on time.

Ira McLain, Xicor's Vice President of IT, inherited the GRICtraveler implementation when he joined the company: "We take the GRIC solution for granted. It operates virtually trouble-free, and I have yet to be in a location where GRIC did not have a local POP."

Xicor's remote access VPN currently has about 100 users, split equally between headquarters and the field. Travel is so frequent at Xicor that the company's favorite insider saying has become: "You may live here, but you don't necessarily work here." Which is why GRICtraveler is such a great fit for Xicor.

"We just keep adding users, and have already surpassed 30,000 minutes of usage a month," observed Ira. "I really like the comprehensive monthly statement we receive. The format makes it easy to spot trends, and when we grow to the point where it becomes cost-justifiable, we may use the report's accounting features to institute a charge-back to individual departments."

The low total cost of ownership of the GRICtraveler solution is perhaps its most important advantage. With dependable plug-and-play installation and operation, simple and transparent upgrades, and virtually no management burden, GRICtraveler makes roaming irresistibly affordable with a savings of up to 90% over international direct dial. With Internet roaming, there are no modem banks or special remote access servers to buy and maintain, and no more huge monthly long-distance or 800-number phone bills to pay.

“We don’t use voice-over-IP today,” Ira added, “but it’s reassuring to know GRIC scales in both capacity and capability to handle just about any application we may need. I don’t say this very often, but this product comes pretty close to perfection.”

Company Information

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