Quest STRATEGIC ADVISOR

Quest | CASE STUDY

Golden Gate builds a network for the future

Since the late 1990s, Golden Gate University (GGU) has been leading the pack in online collaborative learning.

A 24/7, 365-day e-learning institution, GGU is California's fifth largest private university, with six locations, including its flagship campus in San Francisco and a campus in Washington State. What's more, its student body can be found pursuing their advanced degrees on four continents.

GGU's journey to offering a state-of-the-art learning environment began with a number of key initiatives, including the centralization of IT under CIO Anthony Hill. Busy with multi-year projects, GGU decided to leave some of the current infrastructure in place.

However, by early 2005, says CIO Anthony, "We knew it was time to deal with the overall architecture of the network—or risk not being ready to provide the rich services that are so much a part of GGU's strategic vision."

The first meeting with Quest's Shane Seitz, recalls Kathy Lim, Senior Network Security Systems Administrator, made an impression. "I didn't want a vendor that would just send me the product and we're done," says Kathy. "I knew after talking with Shane that this was a group of people we could work with in a long-term relationship."

Indeed, notes Karl, beginning with their pre-sales conversations with Quest and continuing right through the build phase, it became apparent that Quest is a relationship-focused company. "Quest isn't there to figure

THE BOTTOM LINE
A state-of-the-art network for a state-of-the-art learning environment.

Building partnership

According to Karl Ehr, IT Operations Manager, GGU's network was "not much more than an unsophisticated LAN. But we knew what we wanted: A best-of-breed, secure, modular, scalable network."

As it turned out, GGU would build both a university network that's a how-it-should-be-done showpiece as well as a partnership with Quest.

IN THIS ISSUE

A network re-architecture lays the foundation for a university's future educational vision, and changes how its IT team approaches problem solving.

GOLDEN GATE UNIVERSITY *(Cont. from p. 1)*

out how to close the deal as quickly as possible, take their cut, and move on," Karl says. "The attitude is 'what can we, Quest, do for GGU.'"

Invaluable assistance

Quest's role in GGU's network re-architecture would span the design, procurement, and build phases. According to Kathy, Quest engineers spent many hours with her discussing the details.

"Quest really helped with controlling expectations and being able to understand what we would gain with a certain approach—but, also what we'd be giving up," she notes. "Quest's very candid approach was invaluable."

Today, GGU's network is unquestionably a leading-edge design.

"We transformed a very primitive, simplistic, but quite large network into a routed, multi-tiered, highly-secure, modular network capable of supporting almost any configuration necessary in the future," says Karl. "It was a very satisfying experience."

Also very satisfying has been the development of GGU's relationship with Quest.

"Quest came in the door to talk about network and telecomm," Karl recalls, "but it became readily apparent that they can provide just about anything we could be looking for in terms of infrastructure capacity."

FROM TIM BURKE...

Help managing traffic

R eal-time traffic, streaming traffic, bulk traffic, transactional traffic, and web content are the reasons your network is being asked to work harder than ever. Delivering these services to users, however, requires not only bandwidth, it requires the network itself to have the capability to determine how to accommodate the flow of that traffic.

Why? Because not all traffic is equal. Just as a speeding ambulance has priority in a sea of traffic on the highway, your business' time-sensitive and mission-critical applications should have right-of-way.

Traditionally, the method used to accommodate network traffic can best be described as first-come, first-served: whatever bandwidth the application needs it gets, no matter what the repercussions. The result is delays, congestion, packet-dropping, jitter, unhappy users, and frazzled network managers.

The good news is that technologies such as quality-of-service (QoS) are available to help provide better service for network traffic by managing bandwidth allocations. With QoS, realtime and high-priority applications are handled differently than lower priority data applications. And QoS can also help limit the amount of undesirable traffic, including security threats.

If your business is now or will be utilizing any of the rich network applications available—voice-over-IP (VoIP) or video-conferencing, for example—you'll want to think about where QoS fits into your plans.
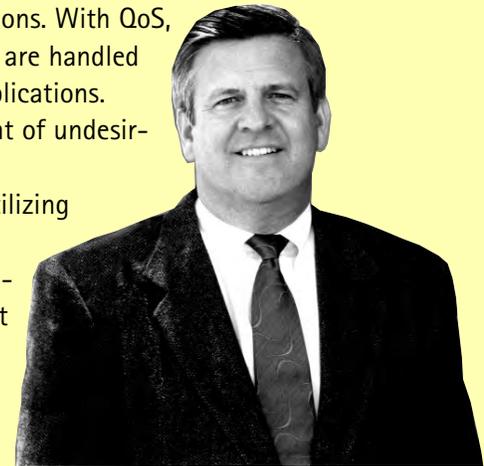
In addition to the network re-architecture, GGU has sought Quest's help with storage upgrades and a wireless and VoIP project. GGU is also discussing disaster recovery and co-location, and how managed services would enhance GGU's IT model.

Quest has also changed the way GGU pursues answers to technology questions. "They're now the first place we look to for resources, information, help—any question," Kathy says.

Karl agrees, adding, "Quest is part of my team now. I turn to them like I would a co-worker."

GGU takes pride in its people being included with the "25 Most Influential CTOs" (*InfoWorld* 2002), named a "CIO 100" by *CIO Magazine* (2004), an *InfoWorld* 100 (2003), and a *ComputerWorld* "Premier 100 IT Leaders" (2007).

Quest's Network Management Services:
When it's time to optimize your network's performance

Are you thinking too much about network bandwidth? Bandwidth is a term that's often misunderstood and misused. What matters in your network is through-put and the network properties, like connectivity and latency, that impact network performance.

When a network performs badly, figuring out what's gone wrong can be a major challenge. The complexity of today's networks make it tough to tell if the problem lurks in the physical network, a badly configured server, or something amiss in an application, a router, or a database.

Proactive expertise and automation at your service

This is where network management services come in. With the right tools and expertise, your network can be kept performing optimally.

Quest's Network Management Services professionals work as part of your IT team. This means you'll have access to their state-of-the-art expertise and leading-edge monitoring and management services.

Quest can test your network and deliver specific recommendations for maintaining and/or improving its performance so your business can benefit from optimal response times, reduced downtime, expedited troubleshooting, protection of assets, and lower compliance costs. Quest's Network Management Services include

- **Network monitoring:** providing total network visibility by proactively and comprehensively managing activity and performance across complex networks,

- **On-site or remote network health monitoring:** tracking network activity to detect anomalies and record overall network performance,

- **Application monitoring:** optimizing visibility, control, and reliable delivery of applications,

- **Trend and capacity planning:** optimizing existing capacity by understanding usage patters and trends,

- **Fault prevention:** heading off outages by spotting performance issues and taking corrective action,

- **Service-level management:** ensuring high levels of service delivery by proactively identifying and correcting potential disruptions, and

- **Custom reporting:** analyzing the patterns, activities, and potential vulnerabilities gleaned from statistical, logging, and graphical data.

DID-YOU-KNOW?

What will drive the next wave of IT adoption

A recent report from Forrester Research (*Embrace The Risks And Rewards Of Technology Populism*) says that the next wave of IT adoption will be powered by a proliferation of consumer devices, social networking tools, and cloud-based collaboration services.

Forrester calls it 'technology populism' because it's driven by people's need to interact. Also contributing to this next wave are …

- **Younger employees** accustomed to supplying their own devices and willing to engage in new forms of communication, including text messaging, instant messaging, mobile devices like iPhones and BlackBerrys, and social computing tools like Facebook and Wikipedia.

- **Low-cost broadband** (with North American household penetration at nearly 50 percent), which has made the web into a premier communication and collaboration platform. Forrester reports that 34 percent of North American adults communicate via instant messaging at least once a month, and 15 percent use social networking sites on at least a monthly basis.

- **A new generation of web-based applications,** such as salesforce.com, LinkedIn, and Facebook, that are changing how businesses generate sales leads, recruit talent, and test and improve products.

- **Web 2.0,** which is being used by 72 percent of IT departments, according to Forrester.

Coming in the next issue of *Quest Strategic Advisor:*

Case Study of BayGroup International

What's New...

Check out these 'IT grand challenges'

From Gartner's Emerging Trends Symposium/ITxpo 2008 come these seven fundamental IT issues to be overcome:

Never having to manually recharge devices. How about charging batteries remotely or powering devices via a remote source? In July 2007, MIT scientists managed to transfer non-radiative power. It's a start.

Parallel programming. This means creating applications that fully exploit a "multi-core" architecture by dividing a problem into smaller individual problems addressed by individual processors.

Non-tactile, natural computing interfaces. Imagine interacting with a computer sans mechanical interface. It'll have the ability to detect gestures, a gesture diction-ary, realtime processing, natural language processing.

Automated speech translation. Beyond human-to-computer communications in one language is the need for computer-to-human translation and output.

Persistent and reliable long-term storage. Overcoming barriers to 100-year or more archiving involves format, hardware, software, metadata, information retrieval, and other issues.

Increasing programmer productivity 100-fold. Exploiting reusable code is only the beginning. Also needed: minimizing time required to find the right software module, avoiding need to modify reusable software, and more.

Identifying the financial consequences of IT investments. The goal: to know pre-cisely how much value (in, say, earnings per share) an IT project will generate.

"I've installed a comprehensive program that will protect our computer against viruses, trojan horses, worms, cooties, hissy fits, conniptions, and the heebie-jeebis."

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