



**Customer:** Vanguard Computer Systems  
**Web Site:** [www.vanguardcomputers.com](http://www.vanguardcomputers.com)  
**Customer Size:** 27 employees  
**Country or Region:** United States  
**Industry:** Technology  
**Partner:** XLink Technology  
**Web Site:** [www.xlink.com](http://www.xlink.com)

Vanguard Computer Systems, based in Brooklyn, New York, offers server colocation, Web hosting and design, off-site backups, and image-archival services to the medical, legal, and restaurant industries and to corporate users.

- Microsoft® Server Product Portfolio
  - Windows Server® 2003
  - Microsoft SQL Server™ 2005
  - Microsoft System Center Data Protection Manager
- Technologies
  - Internet Information Services
  - SQL Server 2005 Reporting Services

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## Technology Provider Boosts Business Continuity for Customers, Increases Business

“Whether it’s a hurricane or just a local power outage, the failover has to be seamless so that the customer doesn’t even notice an interruption of service. With XLink, it is.”

Anthony Pennacchio, President, Vanguard Computer Systems

Vanguard Computer Systems needed to provide its small and medium-sized customers with the business continuity they wanted—at a price below that of typical failover and disaster-recovery systems. It’s providing that high availability and low price thanks to the XLink ClusterReplica solution from Microsoft® Certified Partner XLink Technology. The solution even helps Vanguard to increase its own business with both new and current customers.

### Business Needs

Brooklyn, New York–based Vanguard Computer Systems functions as the de facto IT department for its customers—thousands of medical and legal offices, restaurants, corporate offices, and others in the eastern United States and, more recently, throughout the country. Vanguard staffers visit their customers daily or weekly, as needed, to keep the customers’ systems running smoothly.

An increasing number of its customers have turned to Vanguard to outsource their IT systems as well as their personnel, and in

response the company has developed an extensive infrastructure: 45 servers, redundant OC3 fiber backbones, and a 1-gigabyte network infrastructure in a modern, climate-controlled facility.

But since September 11, 2001, Vanguard’s customers have increasingly been asking for something more than outsourcing support: They’ve been asking for failover and disaster-recovery services. Customers that host their own computers with Vanguard’s help want their data replicated at Vanguard’s facility. Customers already hosting their

infrastructure at Vanguard want to know that Vanguard is replicating their data to an off-site facility as an added level of protection.

"We'd done some failover and disaster-recovery work in the past," says Anthony Pennacchio, President, Vanguard Computer Systems. "But not with near-continuous levels of uptime. And not with the immediate replication. In the past, once-daily backups were sufficient. Now, as our customers have become more aware of the threats to their business continuity, they want a higher level of service."

And Vanguard's business objective is to provide that level of service. The problem, however, was that many of Vanguard's customers couldn't justify the high-end prices of typical disaster-recovery solutions. Vanguard needed a way to offer high-end service on a cost-conscious budget.

## Solution

After extensive research and product trials with different vendors, Vanguard was most impressed with XLink Technology Inc., a Microsoft® Certified Partner based in Milpitas, California.

XLink ClusterReplica Enterprise 2.0, based on continuous data-protection technology, is specially designed for the small and medium-sized businesses that make up the bulk of Vanguard's business. The XLink solution combines high-availability technology and Microsoft System Center Data Protection Manager functions to provide both real-time data replication and failover for server disaster recovery, as well as centralized data management. An intuitive graphical interface enables nontechnical end users to restore multiple versions of their files. The solution runs on Microsoft Windows® 2000 Server, Windows Server® 2003, and Windows XP

operating systems. It supports the real-time data protection and replication of servers running Microsoft SQL Server™ 2000 and SQL Server 2005 database software, Web servers based on Windows Server Internet Information Services, and file servers.

Vanguard applies the XLink solution in pairs: The software is deployed both on the customer's primary production server—which can be either at the customer's site or hosted for the customer at Vanguard—and on a secondary server, which is deployed especially for failover and recovery. The servers are configured in an active/active configuration that allows for data replication every eight seconds or whenever a transaction completes, ensuring that current data is preserved in the event of a disaster.

The secondary server tests the primary server every 15 seconds. If it detects a problem, it automatically kicks off the failover procedure and deploys itself as the production server. Vanguard also uses XLink's File Transfer Protocol (FTP) capability to back up data to a third, remote server in a secure location, for customers who want this added protection.

## Benefits

By using XLink ClusterReplica software, Vanguard has been able to extend high-availability failover and disaster-recovery solutions to its small and medium-sized customers, helping to ensure those customers' business continuity. And it's done so cost-effectively. Pennacchio says that the cost of XLink software is negligible compared to that of its competitors—U.S.\$899 compared to \$35,000 for a pair of software licenses.

"Whether it's a hurricane or just a local power outage, the failover has to be seamless so that the customer doesn't even

notice an interruption of service," says Pennacchio. "With XLink, it is."

For example, one of Vanguard's customers operates a petroleum fuel depot with 10 terminals connecting electronically to a central office and continually relaying information regarding fuel sales. A recent power outage knocked the main office offline, and then a fire at the office made a bad situation worse. But even while the smoke was pouring out of the main facility, Vanguard's failover solution, based on XLink, maintained the data.

Business continuity is a crucial benefit for Vanguard's customers, but it isn't the only one that they see from the XLink solution. Several customers have been able to negotiate lower insurance rates with their carriers because of the protection provided by XLink.

And Pennacchio and Vanguard are benefiting from XLink, as well. Since the company started offering the XLink solution two years ago, the ability to better protect database and Web servers has helped Vanguard to win more database and Web server hosting business.

The company is making about five sales every week to provide failover and disaster-recovery services. In addition to expanding its business with current customers—who make up about 80 percent of its XLink-based business—Vanguard is also using XLink to attract new customers, who then also purchase the company's other services.