

CHALLENGE	SOLUTION	BENEFIT
Seamlessly integrate new applications and capabilities on a robust, highly scalable platform with 24x7 reliability	Dell® PowerEdge® 6450 and 2450 servers running Intel® processors and the Microsoft® .NET Enterprise Server platform	Sufficient processing power and a scalable, flexible platform for growth

Many happy e-returns

Supply chain management company Newgistics simplifies the logistics for customers making e-returns and exchanges

The key to success in retail is a happy customer. The same notion holds true for e-businesses: Customer satisfaction is paramount. Shoppers who are not happy with their online purchases can mean major headaches for e-businesses as they try to make things right.

Coordinating returns and exchanges is a significant expense for e-retailers and often becomes a hassle for consumers. The actual logistics for returning and exchanging purchases are complex because they involve interfacing with a variety of companies and individuals: consumers, retailers, transportation companies, and independent mail centers. But a supply chain management company—Newgistics, Inc.—has found a way to simplify the process for online shoppers and retailers alike.

Launched in December 2000, the Newgistics ReturnValet™ service acts as an e-business broker between retailers and consumers. It provides a network of neighborhood return locations, a logistics system, and a powerful technology platform for coordinating data from both sides of the online transaction—24 hours a day, seven days a week.

Shopping for a platform

Newgistics wanted to simplify the complicated logistics of exchanging purchases by communicating with consumers; integrating with retailers' back-end inventory; offering customer relationship management (CRM), order management, and financial systems; and coordinating transportation services. Heavy data coordination and e-business integration involving many players make this process complex. In addition, high availability and reliability are imperative.

The need to communicate and exchange data with a wide variety of retailer back-end technology led Newgistics to the Microsoft®

.NET platform, which supports a large number of communication protocols. The Microsoft .NET platform features Component Object Model (COM) components, Extensible Markup Language (XML), and the Microsoft Simple Object Access Protocol (SOAP).

Newgistics also chose Dell™ PowerEdge™ enterprise servers as the hardware to run Microsoft .NET. “Dell provides an excellent value with Intel® architecture and also provides tremendous scalability and reliability,” says Mike Dickson, director of information technology at Newgistics.

According to Dickson, Dell PowerEdge servers are a proven, reliable platform with an excellent enterprise track record. “We know we can get any help we need and can also get the servers and peripherals we need as we grow,” he says. “We have a great relationship with Dell and use Dell to run our company as well as our site.”

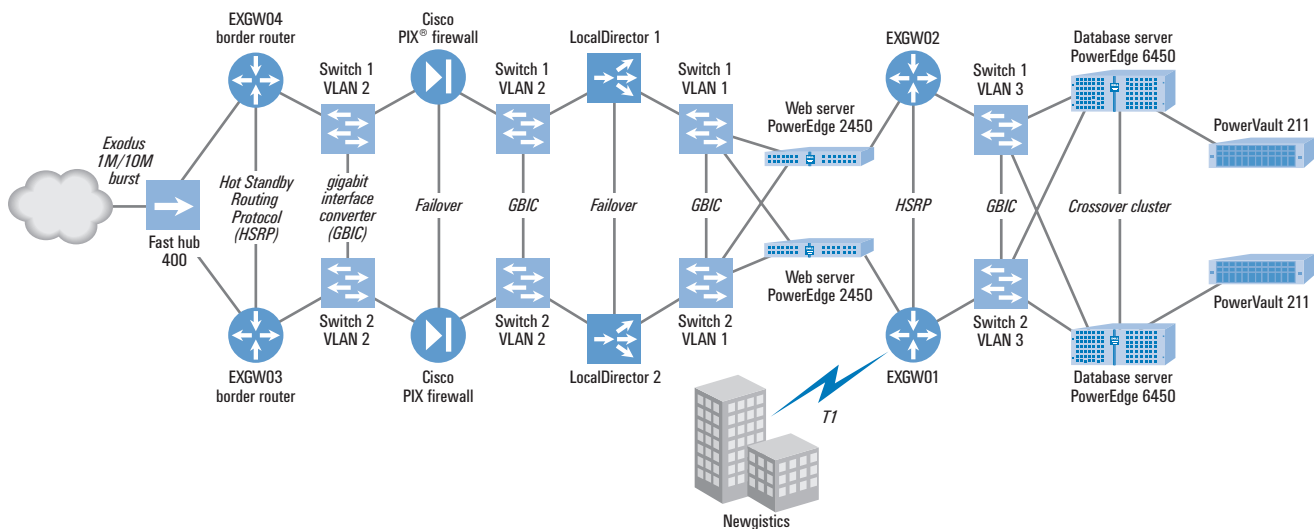
A trial offer at the Microsoft Technology Center

Newgistics visited the Microsoft Technology Center in Austin, Texas, to conduct performance testing and transaction cost analysis. Microsoft and Dell consultants helped Newgistics ensure that its applications could handle the expected processing load and grow as new customers came on board.

“We ran our applications on the same Dell configuration that we were considering buying,” Dickson says. “We had a chance to see the entire setup in action within a trial environment. That was a huge benefit: testing our application’s performance and scalability on the same configuration we would own.”

Returns of the day: Powerful Dell infrastructure

The Newgistics infrastructure consists of a logical three-tier setup implemented on two physical tiers. Front-end Web- and application-server functions are implemented on two Dell PowerEdge



Dell PowerEdge 6450 and 2450 servers and Microsoft .NET provide Newgistics with a powerful platform for growth

2450¹ servers with dual Intel Pentium® III processors and 1 GB RAM. The servers run the Microsoft Windows® 2000 Standard Server operating system, Microsoft Internet Information Services (IIS) 5.0, and custom Newgistics supply chain management software. Cisco® LocalDirector provides load balancing between the two servers. Individual mail centers connect with Newgistics Web servers through fat clients running Newgistics software or thin clients using a Web browser.

On the back end, Newgistics has two Dell PowerEdge 6450¹ database servers in an active-passive cluster. One PowerEdge 6450 functions as the active database server; if it fails, the other takes over, eliminating any single point of failure. Each PowerEdge 6450 has quad Intel Pentium III Xeon™ processors with 2 GB RAM and runs Microsoft Windows 2000 Advanced Server and Microsoft SQL Server 2000 Enterprise Edition. Two Dell PowerVault™ 211¹ storage units provide 70 GB of external SCSI RAID arrays. “Our performance tests showed this architecture was able to handle more than 200,000 returns a day,” Dickson says.

Tailored processes, customer satisfaction

The Newgistics supply chain management engine is built on the Microsoft .NET platform. The ReturnValet application depends on the highly reliable and scalable SQL Server 2000 for database services and on IIS 5.0 to ensure that Internet technology is integrated across all services—from file and print to advanced application services.

“We are very happy with SQL Server 2000,” Dickson says. “It has allowed us to rapidly develop and deploy our application, and it is comparatively easy to administer. Our preliminary load test analysis has shown that it will be able to scale well.”

Newgistics uses Microsoft’s comprehensive Visual Studio® development system version 6.0, including the powerful Visual InterDev® Web development system, which enables engineers to rapidly design, build, and debug data-driven Web applications. The company also uses the Microsoft SOAP Toolkit, which automates all the key parts of creating a Web service using standards-based XML and SOAP.

Newgistics uses COM components and COM+ Base Services to enable its online retailer customers to modify the business logic and tailor the return processing to their unique business needs.

Dell and Microsoft: A perfect fit

Dell PowerEdge 2450 and 6450 servers running on Intel processors and Microsoft .NET Enterprise Servers now form the cornerstone of Newgistics’ technology, providing the company with a scalable and flexible platform for growth.

According to Dickson, “Dell is aligned with Microsoft’s enterprise strategy of easy extensibility of Web services to any audience. Dell is a great high-value infrastructure on which to build a fast-growing business. The Dell systems are incredibly reliable and scalable. We’re able to scale up and scale out by simply adding more servers or more storage. We have a huge amount of growing room with just two servers.”

Newgistics’ ultimate goal is to provide logistics and technology services to any e-business or catalog company anywhere. The company has bet on the Microsoft .NET strategy and Dell servers to take them there. “Dell’s enterprise strategy and the Microsoft .NET strategy are in line with where we are headed,” Dickson says. “It’s a perfect fit.”

¹Newer models are available at <http://www.dell.com>.