

Christianbook.com: Juniper Networks Solution Speeds User Access and Lowers Data Center Costs



Key Challenges:

- Online sales were growing fast for Christian Book Distributors web site, but the company was using outmoded acceleration technology
- Site offers more than 140,000 Christian books, videos, CDs, cassettes, gifts, toys and games online

Key Benefits:

- Significantly increased server capacity, avoiding purchase of more costly servers
- Accelerated user response times
- Created more robust site capable of handling more graphics and advanced services
- Delivered easily installed and managed solution
- Reduced management costs

It was a turning point for Christianbook.com. The online home of Christian Book Distributors had been an early adopter of server load balancing and secure sockets layer (SSL) acceleration solutions. But its vendor for this technology, IPivot, had been acquired by Intel, which later phased out its products. By mid-2002, business conducted over the Christianbook.com Web site had grown significantly, and it showed no signs of slowing. A new solution was needed, one that would effectively scale the site so that it could handle increasing levels of user traffic, without adding expensive server hardware.

“With our e-commerce channel growing substantially, we needed to look at some of the newer technologies, such as compression, and we wanted something that would enable us to serve our customers faster and be absolutely reliable,” said Mark Pepin, assistant vice president of Christianbook.com.

Christianbook.com offers more than 140,000 Christian books, videos, CDs, cassettes, gifts, toys, and games, as well as informational features such as author interviews and profiles. Christian Book Distributors was founded in 1978 to offer the best Christian products at the best prices.

Juniper Networks Acceleration Delivers Immediate Results

A highly tech-savvy company, Christianbook.com develops all of its own applications and thoroughly tests any new technology solutions before making final deployment decisions. After doing research in the trade press and at industry conferences, Pepin’s team narrowed the field to three network-acceleration vendors.

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Assistant Vice President
Christianbook.com

In a comprehensive, months-long evaluation, products from all three vendors were brought in for load- and stress-testing, and were actually deployed in a production environment. “Because our services are set up in a loosely coupled manner,” Pepin said, “we could test products easily on a small portion of the site.”

They found that the best solution for accelerating and securing Web-site performance, as well as improving server capacity and bandwidth usage, was the Juniper Networks DX™ 2200 multifunction platform. The DX 2200 appliance performs data compression, L4-L7 load balancing, Transmission Control Protocol (TCP) connection management, response buffering, SSL processing, and other functions.

For redundancy and failover, two DX 2200 platforms were deployed on Christianbook.com’s network in October 2003, sitting between the company’s firewalls and their Apache/Solaris Web servers.

Pepin’s team noticed immediate results. “The biggest impact was on server capacity,” he said. “Because of the DX compression, we saw up to a 30-percent reduction in the amount of bandwidth required to serve users. In combination with the DX 2200 appliance’s request multiplexing and connection offload, this has let us handle more traffic with the same number of servers and no increase in bandwidth. If not for the DX, we would have had to increase our server hardware expenditure by 15 to 20 percent.”

Page downloads on the Christianbook.com site also got faster. “Not only can we service more transactions with less bandwidth now, but the site is much more robust, which is especially important in a climate where we’re offering more – and more

complex – services. We’ve increased our graphical content by about 30 percent, providing many different views of our products, and added more intelligence to the applications to enhance user self-service. Our site isn’t just an order-taker, it’s a true communications portal.”

Pepin also hopes to take advantage of Juniper Networks newest DX software release, which offers “request routing,” a powerful, flexible content routing to servers based on any combination of Layer 7 data. In addition, a new intelligent reporting capability, which provides easy-to-read visual snapshots of hundreds of system statistics, organized by user-specified time period, will assist in the rapid identification and location of problems.

Rock Solid and Easy to Manage

From evaluation through full deployment, the DX 2200 platform has been easy to work with, Pepin said.

“All the appliances we tested claimed to be ‘plug-and-play,’” he said, “but the others required a tremendous amount of configuration and tweaking for our specific environment. The Juniper Networks appliance took very little time to get up and running, and it was immediately rock-solid.

“We’re very selective about whom we team up with,” Pepin added, “and we always try to develop strategic alliances with our vendors. We’ve had great interactions with the Juniper Networks team. They listen, and they’re receptive to input on new product development. It was a deciding factor when the company founder visited us and was clearly more interested in being in our data center and working with the product than in sitting in a conference room and talking about theory.”



CORPORATE HEADQUARTERS
AND SALES HEADQUARTERS
FOR NORTH AND SOUTH AMERICA

Juniper Networks, Inc.
1194 North Mathilda Avenue
Sunnyvale, CA 94089 USA
Phone: 888-JUNIPER (888-586-4737)
or 408-745-2000
Fax: 408-745-2100

www.juniper.net

EAST COAST OFFICE

Juniper Networks, Inc.
10 Technology Park Drive
Westford, MA 01886-3146 USA
Phone: 978-589-5800
Fax: 978-589-0800

ASIA PACIFIC REGIONAL
SALES HEADQUARTERS

Juniper Networks (Hong Kong) Ltd.
Suite 2507-11, Asia Pacific Finance Tower
Citibank Plaza, 3 Garden Road
Central, Hong Kong
Phone: 852-2332-3636
Fax: 852-2574-7803

EUROPE, MIDDLE EAST, AFRICA
REGIONAL SALES HEADQUARTERS

Juniper Networks (UK) Limited
Juniper House
Guildford Road
Leatherhead
Surrey, KT22 9JH, U. K.
Phone: 44(0)-1372-385500
Fax: 44(0)-1372-385501