



# SPRINGNET

## SERVICE PROVIDER NETWORK

# Metro Provider Captures New Business with Upgraded Network

### EXECUTIVE SUMMARY

#### Challenge

Ensure that enterprise customers have 100 percent network availability and exceptional performance from SpringNet Metro Ethernet services

#### Solution

- Brocade MLX Series routers at the network core
- Brocade NetIron CER 2000 routers at the aggregation layer
- Brocade NetIron CES 2000 routers at the network edge
- Brocade IronView Network Manager for management

#### Results

- Addressed business demand for more bandwidth by upgrading all customer fiber connections to 1 Gbps
- Reduced TCO by maintaining a compact form factor that met existing size requirements while increasing port density and performance
- Reduced the time to proactively monitor and repair customer connections with improved monitoring and troubleshooting capabilities
- Enabled faster time to market by allowing new and existing customers to streamline service installations and upgrades

Based in Springfield, Missouri, SpringNet® has created major headaches for big-name national service providers. The metro service provider, a division of Springfield's City Utilities, has offered a wide range of Ethernet services to business customers since 2000, and its commitment to quality and highly reliable service delivery has helped SpringNet build a large base of satisfied enterprise customers.

Fortune 500 companies, the City of Springfield, major hospitals, city utilities, and hundreds of enterprises rely on SpringNet's dependable network services to keep their businesses running smoothly.

"Our customers expect zero network downtime and demand exceptional performance from their services," says Todd Christell, Manager of Network Architecture and Support at SpringNet. "We are always striving to improve our performance and measurement capabilities to ensure a high-quality customer experience."

### CUSTOMER TRAFFIC SPIKES SPUR NETWORK UPGRADE

The SpringNet network consists of approximately 400 miles of fiber throughout the Springfield metropolitan area, and almost every business in the region can connect to the network and gain access to premier broadband services.

For the last decade, SpringNet has relied on Brocade® networking infrastructure solutions to provide businesses with a unique Internet service, allowing SpringNet customers to burst to 100 Mbps when they need additional bandwidth—an increasingly frequent occurrence.

To accommodate the increasing volume of traffic, SpringNet evaluated different network platforms to upgrade its existing network to 10 Gigabit Ethernet (GbE) at the core and 1 GbE (providing 1 Gbps data rates) at each customer interface. After comparing the technology, feature sets, and pricing of three platforms, SpringNet chose Brocade NetIron® CES 2000 routers, NetIron CER 2000 routers, and Brocade MLX Series routers based on their low Total Cost of Ownership (TCO) and their exceptional port density and performance.

# BROCADE

Many features in the Brocade platforms moved the decision toward Brocade. SpringNet could seamlessly upgrade its current Brocade MLX Series infrastructure to 10 GbE and support IPv6. The Brocade routers are also highly scalable, enabling SpringNet to deploy the NetIron CES 2000 and NetIron CER 2000 routers with 1 GbE bandwidth and easily upgrade to 10 GbE when necessary.

“Brocade won both the technical evaluation and the total cost of ownership evaluation,” says Todd Murren, Director of the SpringNet Business Unit. “Brocade was clearly the best choice for our metro network.”

### SIZE PLUS PORT DENSITY MATTERS

When SpringNet deployed its original Brocade network infrastructure in 2000, it mounted Brocade BigIron® switches directly on the utility poles in environmentally controlled protective cabinets.

When upgrading the network, SpringNet had to consider the available space in the existing mounted protective cabinets. The NetIron CES 2000, with its compact 1U form factor, met the size requirements—and the increased port density provided additional performance.

“Replacing or upgrading the cabinets is complex and expensive, and it requires service interruption to our customers,” says Christell. “The NetIron CES 2000 allows minimal service disruption and a seamless upgrade. The form factor also adds considerable value to the Brocade solution because we do not have to replace the cabinets.”

Using the Multiprotocol Label Services (MPLS) technology in the Brocade infrastructure, SpringNet can ensure high-quality user experiences with applications such as video and voice. For instance, SpringNet can prioritize traffic so that a customer’s large file transfer and sensitive video applications will both be delivered without latency or jitter.

SpringNet also relies on Brocade IronView® Network Manager to help manage, configure, and troubleshoot the IP network. “Our network has hundreds of VLANs that can span multiple Brocade nodes. IronView Network Manager makes adding VLANs simple because we do not have to log into every node and manually configure the circuit,” says Christell. “IronView Network Manager makes locating and tracing a VLAN through our network very visual and easy to understand.”

Operations, Administration, and Maintenance (OAM) features in the Brocade platforms allow SpringNet to proactively monitor customer connections and improve customer service. “OAM allows us to monitor and troubleshoot customer connectivity all the way to the customer premises, reducing time to repair and allowing us to proactively monitor for service abnormalities,” says Christell.

### WHY BROCADE

“Brocade products give us a huge competitive advantage in the market. Our competitors can’t offer these services, let alone meet our install or service upgrade times.” — Todd Christell, Manager of Network Architecture and Support at SpringNet

### KEEPING THE PRESSURE ON RIVAL PROVIDERS

SpringNet, like all service providers, places a high value on its business customers. Because of the new Brocade IP network, SpringNet can offer unique Ethernet services and deliver them on pace with their customers’ business requirements.

Existing customers can upgrade their services, and new customers can be up and running much faster than before. “Brocade products give us a huge competitive advantage in the market. Our competitors can’t offer these services, let alone our install or service upgrade times,” says Christell.

With the upgraded Brocade network, SpringNet can maintain its competitive leadership role, and it is well positioned to expand its market share of high-value enterprise customers.

For more information, visit [www.brocade.com](http://www.brocade.com).

#### Corporate Headquarters

San Jose, CA USA  
T: +1-408-333-8000  
[info@brocade.com](mailto:info@brocade.com)

#### European Headquarters

Geneva, Switzerland  
T: +41-22-799-56-40  
[emea-info@brocade.com](mailto:emea-info@brocade.com)

#### Asia Pacific Headquarters

Singapore  
T: +65-6538-4700  
[apac-info@brocade.com](mailto:apac-info@brocade.com)

© 2010 Brocade Communications Systems, Inc. All Rights Reserved. 09/10 GA-SS-1531-00

Brocade, the B-wing symbol, BigIron, DCFM, DCX, Fabric OS, FastIron, IronView, NetIron, SAN Health, ServerIron, Turbolron, and Wingspan are registered trademarks, and Brocade Assurance, Brocade NET Health, Brocade One, Extraordinary Networks, MyBrocade, and VCS are trademarks of Brocade Communications Systems, Inc., in the United States and/or in other countries. Other brands, products, or service names mentioned are or may be trademarks or service marks of their respective owners.

Notice: This document is for informational purposes only and does not set forth any warranty, expressed or implied, concerning any equipment, equipment feature, or service offered or to be offered by Brocade. Brocade reserves the right to make changes to this document at any time, without notice, and assumes no responsibility for its use. This informational document describes features that may not be currently available. Contact a Brocade sales office for information on feature and product availability. Export of technical data contained in this document may require an export license from the United States government.



**BROCADE**