

## CASE STUDY: GLOBALCONNECT

### Growth in Bandwidth Demand Leads Wholesaler to Foundry



#### SUMMARY

GlobalConnect, one of Europe's largest independent suppliers of fiber-optic infrastructure, is augmenting its existing circuit-switch-based infrastructure with one based on Foundry Networks Layer 2/Layer 3 FastIron® Edge X Series. Foundry's packet-based Ethernet switch infrastructure will complement GlobalConnect's existing transmission infrastructure to deliver a robust, cost-effective solution to meet customers' increased demand for Ethernet leased-line services and higher bandwidth.

Headquartered in Copenhagen, GlobalConnect is the region's largest independent supplier of fiber-optic infrastructure. GlobalConnect leases its infrastructure on a wholesale basis to more than 90 regional and international telecom operators, cable TV network operators, and Internet service providers in Scandinavia and Germany.

#### OBJECTIVE

GlobalConnect's decision to complement its existing circuit-based transmission infrastructure with a packet-based Ethernet solution will help the company meet customers' growing demand for Ethernet connections. The decision to install Ethernet switching was based on the prohibitive costs involved with upgrading the circuit-based infrastructure and the overall cost-effectiveness, scalability, and carrier-class reliability of an Ethernet infrastructure built upon the FastIron Edge X Series (FESX) switches.

#### SOLUTION DESCRIPTION

GlobalConnect installed 20 FESX switches and FastIron 800 modular systems at its Copenhagen locations as the core of its Ethernet infrastructure. The optical network provider will roll out the installation further into the region with an additional 180 units. The FESX-based Ethernet infrastructure will run alongside the existing circuit-based infrastructures and will be used to serve the explosive demand for higher bandwidth.

Foundry's FESX switches are a cost-effective, long-term solution that meet GlobalConnect's capacity and scalability requirements. Available in 24-port and 48-port configurations, the FESX switches deliver wire-speed 10/100/1000 Mbps to 10-Gigabit Ethernet (10-GbE) aggregation in a compact, cost-effective form factor. With four built-in, small form factor pluggable (SFP) Gigabit Ethernet fiber ports and up to two optional 10-GbE small form factor pluggable (XFP) uplinks, the FESX switches efficiently serve GlobalConnect's current capacity requirements while providing the company with a smooth migration path from Gigabit Ethernet to 10-GbE in the future.

"The FESX switch provides an Ethernet solution that meets our strict performance and reliability demands perfectly while assuring us of the capacity and scalability we require to meet our future needs," says GlobalConnect CEO Niels Zibrandsen.

[WWW.GLOBALCONNECT.DK](http://WWW.GLOBALCONNECT.DK)

#### INDUSTRY

Service Provider

#### COMPANY DESCRIPTION

Headquartered in Copenhagen and operating a network of more than 2,400 km of optical cable from Sweden to Frankfurt, GlobalConnect is the region's largest independent supplier of fiber-optic infrastructure. GlobalConnect leases its infrastructure on a wholesale basis to more than 90 regional and international telecom operators, cable TV network operators, and Internet service providers in Scandinavia and Germany.

#### OBJECTIVES

- Expand plant to meet growing demand for Ethernet leased-line services and higher bandwidth
- Implement a network solution that can easily scale for future requirements

#### SOLUTIONS

- Foundry Networks FastIron Edge X Series switches deliver wire-speed 10/100/1000 Mbps to 10-Gigabit Ethernet aggregation in a compact, cost-effective form factor
- FastIron 800 modular systems provide a complete end-to-end LAN solution in a single product family

#### RESULTS

- FastIron Edge X Series switches meet current capacity needs plus scalability and provide a smooth migration path from Gigabit Ethernet to 10-Gigabit Ethernet
- Customer-dedicated virtual LANs are enabled by the Foundry IronWare operating system, offering robust traffic separation
- FastIron Edge X switches ensure 100-percent availability; service restoration times are measured in tenths of a second
- Hardware-based, rate-limiting features enable guaranteed delivery of service and detailed traffic reporting and analysis

## THE RESULTS

The FESX switches meet GlobalConnect's mission-critical, carrier-class performance criteria. To deliver Ethernet bandwidth to its customer base, GlobalConnect requires strict customer traffic separation. Foundry's IronWare® operating system software, a standard feature of the FESX switches, enables GlobalConnect to deliver robust traffic separation by means of customer-dedicated virtual LANs.

The FESX switches also ensure that the provider's customers will experience 100-percent availability of their transmission, even in the event of a fiber-optic cable complication. Like all of Foundry's Layer 2/Layer 3 switching platforms, the FESX switches have adopted the reliability of traditional Synchronous Digital Hierarchy (SDH)-based transmission architectures through mechanisms such as automatic protection switching (APS). Foundry's Metro Ring Protocol (MRP) allows GlobalConnect to guarantee optical network convergence, plus service restoration times measured in tenths of a second.

Hardware-based rate-limiting features available in the Foundry platforms enable GlobalConnect to deliver on customer-approved service level agreements as well. The FESX guarantees that customers' contractually agreed-upon bandwidth is available to them at all times. Each port on the FESX supports sFlow™ data collection, enabling wire-speed, per-flow traffic monitoring. This facilitates networkwide traffic monitoring and provides GlobalConnect with detailed network surveillance and statistics for applications such as service billing, network engineering, fault-monitoring, and troubleshooting.

"GlobalConnect has a track record of year-on-year successful pioneering in the carrier and ISP space," notes Ken Cheng, Vice President of Marketing, Foundry Networks. By choosing the FESX switch, GlobalConnect stands at the forefront of the trend toward migrating from circuit-based services to global Ethernet switching. With the market demanding higher bandwidth, we see migration to Gigabit and 10-Gigabit Ethernet switching as an inevitable natural growth scenario. We also see GlobalConnect's choice of the FESX switch as an affirmation of our success in delivering a best-in-class 10-Gigabit switching solution for carrier and ISP applications."

**“ THE FOUNDRY FESX SWITCH PROVIDES AN ETHERNET SOLUTION THAT MEETS OUR STRICT PERFORMANCE AND RELIABILITY DEMANDS PERFECTLY WHILE ASSURING US OF THE CAPACITY AND SCALABILITY WE REQUIRE TO MEET OUR FUTURE NEEDS. ”**

— Niels Zibrandtsen,  
CEO,  
GlobalConnect

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