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### **FORCE10 NETWORKS ENABLES NATIONAL CENTER FOR DATA MINING'S WINNING BANDWIDTH CHALLENGE ENTRY AT SUPERCOMPUTING CONFERENCE**

**SAN JOSE, Calif., November 20, 2006** – Force10 Networks®, the pioneer in building and securing high performance networks, today announced that the TeraScale E-Series® family of switch/routers enabled participants in the Supercomputing 06 (SC06) Bandwidth Challenge to demonstrate full end-to-end utilization of a 10 Gigabit Ethernet path. The National Center for Data Mining (NCDM) at the University of Illinois at Chicago (UIC), the winner of the challenge, also leveraged the resilient density of the Force10 TeraScale E600 in its booth to transfer a peak data rate of 9.18 Gigabits per second over a single 10 Gigabit Ethernet link.

“The Bandwidth Challenge this year really demonstrated that 10 Gb/s data transfer is becoming feasible without having to spend millions of dollars to fully utilize the network,” said Research Scientist Yunhong Gu, Ph.D., at the National Center for Data Mining at the University of Illinois at Chicago. “The Force10 E-Series and NCDM's high performance transfer protocols were ready for this, and the challenge gave us the opportunity to work together and show off the possibilities.”

As an integral part of SCinet, the conference's high performance network, the Force10 TeraScale E-Series provided the connectivity that allowed participants to connect with their home facilities. NCDM also deployed the TeraScale E600 in its booth to connect with its UIC lab via StarLight, one of the world's largest optical network exchanges that links the majority of the world's research and education networks. StarLight also relies on the high 10 Gigabit Ethernet density of the TeraScale E-Series and has deployed more than 50 line-rate 10 Gigabit Ethernet ports to ensure seamless connection between all networks peering at the exchange.

During its entry, NCDM transferred the Sloan Digital Sky Survey (SDSS) Data Release 5 (DR5), which includes imaging data for roughly 215 million objects, between the show floor and one of its

labs on the UIC campus. NCDM demonstrated sustained throughput of eight Gigabits per second (Gbps) over a single 10 Gigabit Ethernet link with peak traffic reaching 9.18 Gbps.

SDSS is systematically mapping a quarter of the entire sky to produce a detailed image of it and determine the positions and absolute brightness of more than 100 million celestial objects. When completed, it will provide a 3-dimensional map of nearly a million galaxies and quasars. The total survey information is about 15 Terabytes and rivals the information content of the Library of Congress. As the survey progresses, the data are released to the scientific community and the general public in annual increments.

“This year’s Bandwidth Challenge focused on demonstrating applications that fully utilized network resources and could be recreated by other scientists worldwide,” said Debbie Montano, director of research and education alliances for Force10 Networks and chair of the SC06 Bandwidth Challenge. “Once again, the Force10 TeraScale E-Series provided the high performance foundation necessary to support bandwidth intensive, next generation research applications in a real world deployment.”

This year’s challenge stressed applications and results that can be achieved by the average researcher with access to high speed networks. While the adoption of 10 Gigabit Ethernet links is rapidly increasing, achieving data rates close to 10 Gbps or even one Gbps across those high bandwidth networks is still unattainable by most users. For the Bandwidth Challenge, participants were tasked with fully utilizing an end-to-end 10 Gigabit Ethernet link in a manner that was both reproducible and leveraged the home institution’s facilities, policies and resources. The result is a legacy that scientists can recreate in their own networks.

### **About Force10 Networks**

Force10 Networks is the pioneer in building and securing high performance networks. Based on a revolutionary system architecture that delivers best-in-class resiliency and massive scalability, Force10’s TeraScale E-Series switch/routers ensure predictable application performance, increase network availability, and reduce operating costs. Today, many of the world’s largest Gigabit Ethernet and 10 Gigabit Ethernet networks depend on Force10 Networks. For additional information, please visit [www.force10networks.com](http://www.force10networks.com).

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