

## One of the Fastest Networks in the World Goes Live in Seattle for Annual Supercomputing Conference

Massive 450 Gigabits of Capacity to Enable Breakthrough High Performance Computing Demonstrations; Media invited to tour live network operations center on exhibit floor

Seattle, Washington – November 11, 2011 – Beginning this Saturday, November 12, Seattle will be home to SCinet, one of the fastest computer networks anywhere in the world.

SCinet is built each year to support SC, the international conference for high performance computing, networking, storage and analysis. More than 150 engineers hailing from industry, academia and government institutions have volunteered their time over the past year to plan and build SCinet using over \$27 million in donated equipment from leading vendors from around the world. The network will serve as the primary backbone supporting all 10,000+ SC conference attendees and exhibitors as they unveil latest innovations in high performance computing (HPC) applications.

"SCinet is the primary platform for SC exhibitors to show off their most cutting edge computing applications and collaborations. We support this by building a sophisticated on-site network that links the entire exhibit floor to the largest and one of the fastest research networks around the world," said Jeff Boote, Assistant Director of R&D Architecture and Performance for Internet2 and chair of SCinet for SC11. "As science continues to become more distributed and data intensive, networks are more critical than ever. SCinet allows the networking community to show researchers at SC first hand how new network solutions can accelerate science."

As it does each year, SCinet will be provisioning an unprecedented amount of bandwidth into the conference's host convention center. In 2011, SCinet will for the first time connect multiple 100 Gbps circuits in collaboration with leading research networks including Internet2, the Department of Energy's ESnet, National LambdaRail, and CANARIE who are donating this bandwidth to support the conference. In total, SCinet will deliver more than 450 Gigabits per second in total capacity to the Washington State Convention Center (WSCC).

Boote added, "The SCinet team is thrilled to be bringing 100 Gbps technology to SC11 exhibitors this year. Nearly a dozen research projects led by major research labs, supercomputing centers, universities and industry plan to fill up several dedicated 100 Gbps links to showcase impressive, data-intensive demonstrations."

In addition to the massive capacity SCinet will bring to the convention center, the network is also providing an experimental testbed called the SCinet Research Sandbox (SRS), which provides a unique opportunity for researchers to showcase disruptive technologies at the forefront of network research. SRS is a joint effort with the SC11 Technical Program and will feature a live 10 Gbps, multi-vendor OpenFlow network testbed. OpenFlow allows the creation of software-defined network policy, which stands to be one of the most significant network innovations in support of HPC. Eleven projects will take

part in the SRS and the top six submissions will join a panel as part of the Disruptive Technologies program.

Because SC11 will actually outgrow the space available at the WSCC, SCinet will extend capabilities into two nearby hotels and The Conference Center across the street from the WSCC, which will accommodate the additional space needed for the growing technical program. To ensure reliable service across all of these venues, SCinet will install more than 100 miles of fiber optic cable in and around the convention center and will deploy 190 wireless network access points to provide attendees with wireless connectivity through the conference space.

"Our attendees have come to expect the highest quality network service – no matter where they are in the convention center. It's our priority to work with more than 60 leading industry vendor partners and collaborator organizations across research and education to ensure we have both the research and commodity network capabilities in place to provide attendees the first class network experience they are accustomed to at SC," said Boote.

SCinet is the result of significant contributions by many government, research, education and corporate collaborators who have volunteered time, equipment and expertise to ensure SC11's success. Collaborators in SCinet for 2011 include:

Air Force Research Laboratory, Alcatel-Lucent, Argonne National Laboratory, Army Research Laboratory, Brocade, CENIC, Ciena, Cisco, Clemson University, ComScope, CSC, Dell Force 10, ESnet, Electronic Visualization Laboratory (EVL), Florida LambdaRail (FLR), Fujitsu, GEANT, Gigamon, GLIF, HEAnet, HP, IBM, Indiana University, Infinera, Inmon, Integra, Internet2, Ixia, Juniper Networks, Los Alamos National Laboratory, Lawrence Berkeley National Laboratory, LEARN, National Center for Atmospheric Research (NCAR), National Center for Supercomputing Applications (NCSA), National Energy Research Scientific Computing Center (NERSC), National LambdaRail (NLR), National Oceanic and Atmospheric Administration (NOAA), Oak Ridge National Laboratory, Pacific Northwest GigaPoP, Pacific Wave, Pronto Systems, Purdue University, Sandia National Laboratories, Schneider Electric, San Diego Supercomputer Center, Space and Missile Defense Command / Army Strategic Command, Software Process Technologies, StarLight, Translight, Tulane University, University of Amsterdam, University of Chicago, University of Florida, University of Oklahoma, University of Utah, University of Washington, and University of Wisconsin.

Members of the media are invited to visit the on-site network operations center and see the network in action during SC11. Media registration for the conference is open. Members of the press can attend for free, but must fill out the <u>online press form</u>.

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