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**NATIONAL LAMBDA RAIL COMPLETES REVOLUTIONARY NATIONWIDE ADVANCED NETWORK INFRASTRUCTURE****Optical, Ethernet and IP Networking Capabilities Offer Networking and Scientific Research Communities Unique Opportunities, Capabilities**

Cypress, Calif. – February 20, 2006 – National LambdaRail (NLR), a consortium of leading U.S. research universities and private sector technology companies, today announced that it has completed deployment of a nationwide advanced optical, Ethernet and IP networking network infrastructure on more than 15,000 miles of fiber optic cable across the United States.

NLR provides researchers unprecedented control over a nationwide network infrastructure with up to 40 individual lightpaths—each of which can transmit data at 10 gigabits per second and be used to deploy dedicated side-by-side, but physically and operationally separate, production and experimental networks. The infrastructure is the result of over three years of work and nearly \$100 million in funding by members.

"The fully operational National LambdaRail infrastructure marks an unprecedented milestone for the U.S. research community," said Tracy Futhey, NLR Board Chair. "For the first time, a nationwide networking infrastructure is owned and operated by the research and education community, giving scientists flexible access to advanced networking capabilities and enabling experiments and collaborations across geographic barriers."

NLR's WaveNet, FrameNet, and PacketNet services are already in use by more than a dozen cutting-edge research projects, including the National Science Foundation-supported Extensible Terascale Facility and OptIPuter projects; the U.S. Department of Energy's UltraScience Net project; CENIC and the Pacific Northwest Gigapop's Pacific Wave project; the CAMERA project led by CalIT<sup>2</sup>, the

Venter Institute and UCSD's CEOA; the University of Virginia–led CHEETAH project; as well as Internet2's Hybrid Optical Packet Infrastructure (HOPI) project.

"NLR provides a unique and invaluable resource for scientists undertaking ambitious research that demands the highest performance, most flexible networking available," said Dr. William R. Wing, a researcher in the Networking Research Group of Oak Ridge National Laboratory's Computer Science and Mathematics Division. " The NLR infrastructure provides unsurpassed breadth of services and capabilities to researchers in the United States, outstripping those available to many of their colleagues around the world."

NLR is committed to promoting the extensive and active use of its infrastructure and resources by diverse groups within the scientific and networking research communities. In addition to committing to provide up to half of its infrastructure to network research, it has established Network Research and Scientific Research advisory councils consisting of leaders from a wide range of scientific disciplines.

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### **About National LambdaRail**

National LambdaRail, Inc. (NLR) is a major initiative of U.S. research universities and private sector technology companies to provide a national scale infrastructure for research and experimentation in networking technologies and applications. NLR puts the control, the power and the promise of experimental network infrastructure in the hands of our nation's scientists and researchers. Visit <http://www.nlr.net> for more information.