Pat A. Strong Chair

Scott O. Brame Vice Chair

Artis L. Terrell, Jr. Secretary

E. Joseph Savoie Commissioner of Higher Education



BOARD OF REGENTS P. O. Box 3677 Baton Rouge, LA 70821-3677 Phone (225) 342-4253, FAX (225) 342-9318 www.regents.state.la.us

October 3, 2007

Robert J. Bruno Richard E. D'Aquin Maurice C. Durbin Donna G. Klein Ingrid T. Labat Robert W. Levy W. Clinton Rasberry, Jr. Mary Ellen Roy William Clifford Smith Victor T. Stelly Harold M. Stokes Roland M. Toups James Klock Student Member

Contact: Kevin Hardy

Louisiana Joins TeraGrid

Baton Rouge, LA: The National Science Foundation awarded the Louisiana Optical Network Initiative, or LONI, a prestigious grant for \$2.2 million that allows Louisiana to join the TeraGrid, a backbone of national cyberinfrastructure. TeraGrid is a nationwide, National Science Foundation, or NSF,-funded research infrastructure that incorporates high-performance computing resources at nine sites across the country.

The award will fund initiatives for Louisiana researchers to develop broader use of LONI resources as well as underwrite the operations costs associated with joining TeraGrid. As a member of TeraGrid, LONI will contribute one half of its centerpiece supercomputer, Queen Bee's, computational cycles to the TeraGrid community. LONI researchers will in turn be able to utilize the TeraGrid's national resources.

"It is exciting to see Louisiana's investment in supercomputing technology continue to deliver significant dividends," said Governor Kathleen Babineaux Blanco. "This grant, making possible our participation in the TeraGrid, is further confirmation that Louisiana's technological infrastructure can compete with the best the world has to offer."

Charlie McMahon, LONI executive director, served as principal investigator for the NSF grant. McMahon expresses his excitement concerning the grant's potential impact for Louisiana researchers.

"The \$2.2 million investment by the NSF will enable LONI to empower the state's researchers to fully utilize this first-rate cyberinfrastructure," McMahon said, "LONI will expand its premier technical support environment in keeping with its bleeding-edge technological infrastructure. We plan to employ several more computational science experts to ensure Louisiana researchers can effectively use our computational resources to continue advancing their top-tier research."

As Les Guice, LONI management council chair and vice president for research and development at Louisiana Tech University, emphasizes, "This formal connection for LONI scientists to the TeraGrid opens access to leadership-class resources that are essential for scientific discovery in today's most complex problems." The NSF funds will be used to fund positions dedicated to

(More)

TeraGrid ADD TWO

increasing use of LONI resources. Guice maintains, "New resources to enhance the human component of LONI will prove to be a key enabler for advancing Louisiana's competitiveness in the national research agenda, and ultimately, our success in the global innovation economy."

Ed Seidel, LSU's Center for Computation & Technology director and LONI chief scientist, said because only nine sites are partners on the TeraGrid, this puts Louisiana in high standing among nationwide high-performance computing environments.

"Louisiana has made great investments in cyberinfrastructure through Vision 2020 and the Governor's IT Initiative, in creating LSU's Center for Computation & Technology and in creating LONI," Seidel said. "Now with this additional support from the National Science Foundation, we will expand our high-performance computing operations, benefiting our local user community while also serving the nation. In joining the TeraGrid, our environment will augment and become tightly integrated with the national cyberinfrastructure, empowering our researchers to collaborate on innovative projects with some of the top researchers and resources in the country."

Louisiana's involvement with the TeraGrid demonstrates the state's continued development as a serious contender in the realm of supercomputing. "Participation in the TeraGrid extends LONI's optical network impact and supercomputing reach," explains Steve Landry, vice president for academic affairs at University of Louisiana Lafayette and member of the LONI management council, "This creates one more level of synergy for Louisiana's science, engineering and high-performance computing community. This success brings with it both positive recognition of the steps Louisiana has already taken and provides additional opportunities for our research and development community to collaborate and participate at a world-class level."

Louisiana Optical Network Initiative is a state-of-the-art fiber optics network that runs throughout Louisiana, and connects Louisiana and Mississippi research universities to one another as well as National LambdaRail and Internet 2. LONI provides Louisiana researchers with one of the most advanced optical networks in the country and the most powerful distributed supercomputer resources available to any academic community with 85 teraflops of computational capacity. Additional information may be found online at <u>www.loni.org</u>.

TeraGrid is an open scientific discovery infrastructure combining leadership class resources at nine partner sites to create an integrated, persistent computational resource. Using highperformance network connections, the TeraGrid integrates high-performance computers, data resources and tools, and high-end experimental facilities around the country. Currently, TeraGrid resources include more than 250 teraflops of computing capability and more than 30 petabytes of online and archival data storage, with rapid access and retrieval over highperformance networks. Researchers can also access more than 100 discipline-specific databases.

(More)

The Board of Regents is an Equal Opportunity and ADA Employer

TeraGrid ADD ONE

With this combination of resources, the TeraGrid is the world's largest, most comprehensive distributed cyberinfrastructure for open scientific research. TeraGrid is coordinated through the Grid Infrastructure Group (GIG) at the University of Chicago, working in partnership with the Resource Provider sites: Indiana University, Oak Ridge National Laboratory, National Center for Supercomputing Applications, Pittsburgh Supercomputing Center, Purdue University, San Diego Supercomputer Center, Texas Advanced Computing Center, University of Chicago/Argonne National Laboratory, and the National Center for Atmospheric Research. Additional information may be found online, <u>www.teragrid.org</u>

- 30 -