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News Briefs:

New Era of Research Computing Begins at LSU

The LSU Center for Computation & Technology and LSU Information Technology Services have formed a partnership to optimize research and high performance computing, or HPC, on campus that will significantly improve user support and advance research.

As part of the partnership, the two organizations have launched a Web site, <http://www.hpc.lsu.edu>, to give researchers a central gateway to the supercomputing resources of LSU. Large computing machines like Pelican, Santaka, SuperMike, Nemeaux and SuperHelix will be available to researchers at the click of a mouse via an application process through the site.

"We're making a fresh start and doing things differently in HPC. Information technology-enabled research is key to both our organizations' strategic efforts to advance the University's research mission, which will lead to a better environment for learning, research and discovery," said LSU chief information officer Brian Voss.

CCT and ITS will focus on different aspects of the role HPC will play in research. CCT will work with faculty to develop new and innovative ways to use computing to advance their individual disciplines as well as interdisciplinary projects. ITS will concentrate on management of LSU's HPC infrastructure, which includes computers, storage and high speed networking, and provide quality support and training to users.

"By focusing on what we think each of our organizations is meant to do and by joining forces, we've got a very good foundation to build the kinds of computing services and support that people need. Our vision is to create a merged environment where we each focus on customer service, but the services from each organization will be different," said CCT director Edward Seidel.

The new HPC organization and Web site will streamline access for LSU faculty to more than 13 million hours of computing time per year and a nearly nine teraflops capacity on the six computational systems available in the HPC group. In keeping with the University's Flagship Information Technology Strategy, faculty and both graduate and undergraduate students from all disciplines will be able to focus more effectively on their research and spend less time managing and maintaining the computational resources they need.

The partnership sheds the traditional model that most universities use today to deliver high performance computing. Instead of having separate administrative and research computing groups, CCT and ITS have broken the mold by taking advantage of the logical crossover of skill

sets among technology researchers and staff. Using a collaborative approach and combining staff allows the organizations to combine investment strategies and leverage their purchasing power towards the acquisition of future machines and expertise at LSU.

The University will also save roughly \$1 million per year in personnel costs. Both CCT and ITS had hiring plans for system administration and user support staff, but as part of the partnership, the two organizations combined their personnel plans and eliminated the need for possible duplicate positions. These savings will allow CCT and ITS to invest more heavily in growing the HPC infrastructure, provide deeper support for its use and increase the resources designed to advance use by researchers in both traditional and non-traditional disciplines.

CCT and ITS are continuing to make plans for further improvements to have the most effective impact on research computing at LSU and fulfill their goal of becoming one of the premier HPC collaborations in the country. Already, the partnership staff is playing a leading role in deploying the Louisiana Optical Network Initiative supercomputers across the state as well as working with the Southeastern Universities Research Association on initiatives to develop HPC resources throughout the southeast U.S. The collaboration they have created, coupled with statewide projects such as LONI and forthcoming hardware expansions at LSU, keeps Louisiana in a national leadership position, not only in deploying the most advanced high-tech infrastructure, but also in using it for scientific, engineering, arts and business applications.