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Dell, Tech deal boosts La. research

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Louisiana's supercomputer network is receiving a significant boost courtesy of a new deal struck with Dell computers, much of which will directly benefit Louisiana Tech University.

The goal is to enhance the computing power of the new Louisiana Optical Networks Initiative (LONI) that is already making the state's research computing capacity among the nation's best. That will place the state in prime position to receive some of the nation's top research grants.

Finalizing the deal, first reported by *The News-Star* in June, has taken time, said Les Guice, LONI management committee chairman and Tech vice president for research and development.

LONI will install six clusters comprised of Dell PowerEdge 1950 servers at the six LONI member campuses: Louisiana Tech, LSU, University of Louisiana at Lafayette, University of New Orleans, Southern University and Tulane University.

Each 132-node cluster will feature five teraflops of storage. In addition, LONI will soon install a network that features a 50-teraflop Intel Linux Cluster to be housed at the state's Information Systems Building in Baton Rouge.

Five teraflops permit roughly 500 trillion calculations per second in the LONI network.

"Never before could Louisiana really compete at the level we'll be able to compete now," Guice said.

Tech's "Bluedawg" supercomputer was the first of five supercomputers installed beginning in January for Louisiana universities to help connect LONI.

Delivery of the new Dell equipment to Tech should start in about two weeks, Guice said, and should be fully functional no later than December.

Tech will immediately benefit in areas like nanotechnology and engineering projects and research, but all Louisiana universities, including those without supercomputers, are expected to benefit.

The new computers, along with additional system and hardware upgrades, will provide a significant increase in computational resources for academic research, including the

ability to perform hurricane tracking and storm-surge modeling at much higher speeds and with greater accuracy than currently possible.

The Dell agreement was completed after Gov. Kathleen Blanco signed the state appropriations bill, which earmarked \$7.5 million for the upgrade project. The project would have cost more

than \$14 million, but Dell and Intel agreed to a significant discount.

"These enhancements to LONI's computing power will make the network particularly attractive to the kinds of companies we need here to energize our state's high-tech economy," Blanco said in a prepared statement. "That's why we're leveraging the state's investment in LONI by reserving 10 percent of the grid's computational power for the creation and retention of high-tech jobs. Simply put, any businesses in the state able to connect to LONI can use access to the network as an inducement to recruit companies that would benefit from world-class computational capacity."

State Commissioner of Higher Education Joseph Savoie noted that Louisiana was suffering in attracting federal grant dollars before LONI was activated.

"Now, as we anticipate an extended recovery period (after the hurricanes), LONI's potential impact on academic research and economic development is more important than ever," Savoie said. "This enhanced computing power is welcome news for our devastated education and research infrastructure."
