iSGTW INTERNATIONAL SCIENCE GRID THIS WEEK

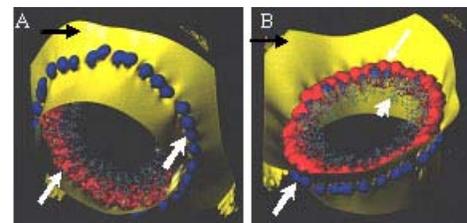Home > 4 April 2007 > Feature - NYS Grid: Spreading the Word

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Last summer a collection of universities and labs in New York Sate gathered with the goal of creating a cyberinfrastructure initiative to make it easy for regional scientists to manage data and use imaging software. This seven-month-old cyberinfrastructure, with New York State Grid as its foundation, may be in its infancy but it is growing, with lofty goals.

"We are trying hard to get users in New York state to take the plunge and use the Grid," says Russ Miller, professor at SUNY-Buffalo and executive director of the cyberinfrastructure initiative.
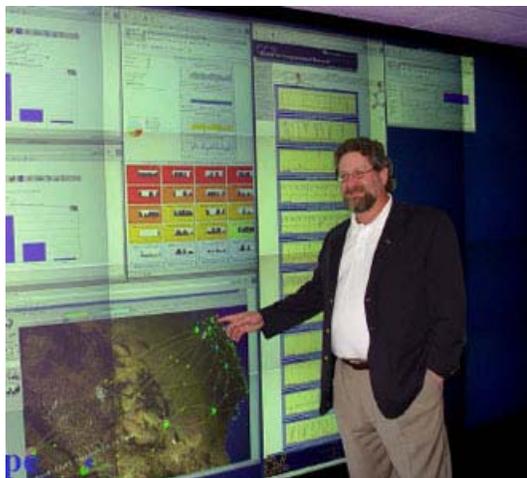
NYS Grid uses the Open Science Grid software stack; Miller and his team are developing middleware to run on top of OSG software to support applications in biomedical computing, molecular structure studies and structural biology.

Images of a cholestosome model, generated with NYS Grid resources.
Image courtesy of Mary McCourt, Niagara University

Mary McCourt, Niagara University's chemistry department chairperson, uses NYS Grid in her own molecular modeling research and in teaching her students.

Russ Miller giving a presentation about NYS Grid to researchers from western New York.
Image courtesy of Center for Computational Research at SUNY-Buffalo.

"What the Grid is allowing us to do," says McCourt, "is give the students hands-on experience with very computationally intense models. It lets them really look at the problem in depth."

In the past McCourt's work quickly reached the limits of the computational resources available to her. Using NYS Grid, she says, "it will be faster, but also, we'll be able to accomplish more of it. This will help us increase our research capabilities."

Currently about half a dozen New York institutions are on NYS Grid. Miller hopes many other institutions will join as researchers learn more about the potential of distributed computing.

"To many people the Grid is a mystery," Miller says. To spread the word, Miller travels from institution to institution to explain the benefits of grids.

"Scientists realize it's worth the effort and investment. It'll be a huge benefit to their science and using grids gives a sense of community."

One of Miller's primary concerns is making using grids easier for the end user. NYS Grid middleware developers are collaborating with users to make the applications more user friendly.

"Ideally we would like to end user to be able to sit on a beach in Cancun with a beer in one hand, a PDA in another and submit a job without wondering when or where it will be run. He can say, 'I'm going to go surfing. Buzz me back in two days when it's done.'"

To learn more see this recent presentation by Russ Miller or visit the NYS Grid Web site.

-Danielle Venton
iSGTW Editor