



NCCS Sponsors VisIt Visualization Workshop

The National Center for Computational Sciences (NCCS) recently sponsored a workshop on the basics of VisIt, a DOE-developed scientific visualization program.

According to Sean Ahern, Visualization Task Leader at NCCS, the class is the first in what he and others at NCCS hope will be a series of “code camps,” aimed at training researchers “in a number of technologies that they wouldn’t have time to learn on their own.”



Scientists from Oak Ridge National Laboratory participate in the National Center for Computational Sciences' VisIt Visualization Workshop.

The workshop, held May 23, was primarily for Oak Ridge National Laboratory (ORNL) scientists involved in high-performance computing, says Ahern, although it was open to everyone and did generate interest from outside the Lab. The attendees included representatives from the National Center for Computational Sciences, the Computer Science and Mathematics Division, the Geographic Information Systems Group, and the Fusion Sciences Division.

Most people at ORNL aren't very familiar with VisIt, says Ahern, adding that this workshop was “very simple.” The same basic class has been taught at Lawrence Livermore National Laboratory where the program was developed.

VisIt is designed to provide scientific visualization to researchers with an enormous amount of data, up to the petascale level. However, it can also be used on desktop systems to represent data at the kilobyte level. Essentially, says Ahern, VisIt's visual data representations allow researchers to better understand results that may be too overwhelming or too complicated to easily comprehend otherwise.

While many of VisIt's capabilities are often displayed in colorful, flashy, three-dimensional simulations, the data can be viewed in a variety of forms and dimensions, further expediting the process of data comprehension. VisIt has several strengths, says Ahern, citing its parallel nature, plug-in architecture, and open-source availability as the primary three.

Paul Kent, a research scientist in the Computer Science and Mathematics Division who attended the workshop, described it as “effective” and “well-structured,” with plenty of hands-on training. While Kent has used VisIt before in presentations abroad, he said the workshop gave him a better understanding of how the program works and its many capabilities.

The VisIt workshop is the first in a series of workshops to be sponsored by the National Center for Computational Sciences.

For more information, contact:

Sean Ahern

National Center for Computational Sciences

(865) 241-3748

ahern@ornl.gov