Ohio Cyberinfrastructure Projects Recognized for Achievements; Showcased at 2007 Advanced Technology Summit

COLUMBUS, Ohio — May 1, 2007 — *Firefighters near Toledo brace for the heat of a flashover in a simulator while firefighting students at a university campus many miles distant study the live-action video over a fiber-optic network.*

Middle school students in Appalachian Ohio immerse themselves into a society on a virtual island they visit over the state-of-the-art network, moving about, walking, running and even flying through highly developed landscapes, park-like settings and buildings.

More than 2,000 researchers from 50 different countries access a server at a university in Cincinnati to analyze the function and structure of proteins, aiding in their studies of various health issues such as breast cancer.

These and other innovative examples of leadership, collaboration and research using Ohio's cyberinfrastructure were showcased tonight (May 1) at the 2007 Advanced Technology Summit awards presentation, sponsored by the Ohio Supercomputer Center.

Adding to the event's theme of innovation, the Cleveland Institute of Music performed the first live, bi-location concert in Ohio. Two musicians in Columbus and three in Cleveland performed together via a high definition video-stream, traveling at high speed (10 to 30 megabits per second) through the OSCnet fiber-optic network. OSCnet engineers and researchers worked with an array of emerging network technologies to ensure the audio and video components of the concert met the demands of the accomplished musicians.

"The Advanced Technology Summit was established to link industry, academic and government professionals to forge a vision for the use of emerging technologies to benefit Ohio and its citizens," said Stanley C. Ahalt, executive director of OSC. "The awards program recognizes the wonderful technology-related achievements of Ohio's brilliant scientists and educators, and, we hope, helps to accelerate the development and use of the state's cyberinfrastructure."

The Ohio Supercomputer Center provides the state with a sophisticated public cyberinfrastructure: high-performance computers, data storage systems, research support and advanced networking. The center also provides the expertise to integrate these elements to promote collaboration, improve productivity and support learning and discovery.

The evening's top honor, the Lightspeed Award, was presented to Director Steve Gruetter for the work of Platform Lab, the nation's only non-profit information technology test and training facility. The Columbus laboratory has expanded its operations over OSCnet to provide disaster recovery plan evaluation, scalability load/stress evaluation, proof-of-concept evaluation and IT training services to more than 100 clients at several locations around the state and the country. The Lightspeed Award is presented for exceptional achievement in all three major cyberinfrastructure award categories – leadership, collaboration and research.

"The work of the Platform Lab is a very creative application of both grid computing and advanced networking in support of pragmatic solutions to information technology and high-performance computing

challenges facing the private sector," said one of the judges for the Lightspeed Award.

The Achievement Award was presented to E. Garrison Walters, senior vice chancellor of the Ohio Board of Regents, for his leadership and support of OSCnet, the nation's leading fiber-optic research and education communications network. OSCnet, formerly the Third Frontier Network, was launched in November 2004 and provides broadband access to Ohio's colleges and universities, federal labs, research hospitals, K-12 schools, non-profit organizations, government agencies and industrial research partners.

Additional award recipients were honored in six categories: leadership, collaborations (national), collaborations (statewide), collaborations (community), experimental and applications research (modeling simulation and visualization), and experimental and applications research (measurements and instrumentation).

- The Science and Technology Enrichment for Appalachian Middle-schoolers (STEAM) project earned the AT Summit award for **leadership**. The project teams graduate teaching fellows with Appalachian-Ohio schoolteachers to create and deliver engaging digital curricular content for grades six-eight.
  - *Ohio University (Athens, Ohio).*
- The AT Summit award for **collaborations (national)** was earned by the Platform Lab for operations over OSCnet to provide disaster recovery plan evaluation, scalability load/stress evaluation, proof-of-concept evaluation and IT training services to more than 100 clients around the state and the country.
  - *Platform Lab (Columbus, Ohio).*
- The AT Summit award for **collaborations (statewide)** was awarded to the Shared Services for Disaster Preparedness project, developed by The Ohio State University and University of Cincinnati. The project provides groundbreaking methods for providing effective and low-cost backup computing system support over OSCnet. The second phase of the project involves offering services to additional organizations, and the third phase features expansion of capabilities with a corresponding increase in technical and functional sophistication.
  - *The Ohio State University (Columbus, Ohio) and University of Cincinnati (Cincinnati, Ohio).*
- An AT Summit award for **collaborations (community)** was presented to Owens Community College for a project providing educational training to first responders, using OSCnet to provide terrorist, hazard and disaster response exercises via distance learning and for collaborating over OSCnet with Ohio University's Game Research and Immersive Design lab on a simulation game to train first responders in various fire scenarios.
  - *Center for Emergency Preparedness at Owens Community College (Perrysburg, Ohio).*
- The University of Cincinnati received an AT Summit award for **experimental and applications research (modeling simulation and visualization)** for the development of the SABLE project and related initiatives, through which learning-based methods for genome annotation, analysis and prediction have been devised and made available through OSCnet to researchers from around the world.
  - *University of Cincinnati College of Medicine and Children's Hospital Research Foundation (both Cincinnati, Ohio).*
- The AT Summit award for **experimental and applications research (measurements and instrumentation)** was received by The Ohio State University for developing hardware, software and techniques for sharing sophisticated laboratory instruments and facilities around the state with other researchers in academia, industry or national laboratories.
  - *The Center for Advanced Maturation of Materials at The Ohio State University (Columbus, Ohio).*

Sponsors of the event include: Advanced Micro Devices Inc., IBM, Qwest Communications International Inc., James River Technical Inc., SGI, BlueArc Corporation, Whiteboard Broadband Solutions and the

Cleveland Institute of Music.

Nominations (some multiple) were received for outstanding projects at the following organizations:

- Advanced Computing Center for the Arts and Design (ACCAD) at The Ohio State University,
- Australia's Academic and Research Network (AARNet), Canberra, Australia
- Center for Emergency Preparedness at Owens Community College, Perrysburg, Ohio
- Center for the Accelerated Maturation of Materials (CAMM) at The Ohio State University, Columbus, Ohio
- Charles Sturt University, Bathurst, Australia
- Children's Hospital Research Foundation, Cincinnati, Ohio
- College of Medicine at the University of Cincinnati, Cincinnati, Ohio
- Department of Astronomy at The Ohio State University, Columbus, Ohio
- Department of Computer Science and Engineering at The Ohio State University, Columbus, Ohio
- Department of Computer Science at the University of Cincinnati, Cincinnati, Ohio
- Department of Materials Science and Engineering at The Ohio State University, Columbus, Ohio
- Department of Physics and Astronomy at Ohio University, Athens, Ohio
- Department of Physics and Astronomy at the University of Toledo, Toledo, Ohio
- Edison Community College, Piqua, Ohio
- Holy Angels School, Dayton, Ohio
- Ohio Department of Education, Columbus, Ohio
- Ohio University, Athens, Ohio
- Piano Pedagogy Research Laboratory at the University of Ottawa, Ottawa, Canada
- Platform Lab, Columbus, Ohio
- School of Earth Sciences at The Ohio State University, Columbus, Ohio
- University of Cincinnati, Cincinnati, Ohio
- University of Dayton, Dayton, Ohio
- University of Toledo, Toledo, Ohio
- University of Waterloo, Ontario, Canada
- Virtuosi - International Centre of Chamber Music, Kuhmo, Finland
- Youngstown State University, Youngstown, Ohio

Ohio Supercomputer Center: Celebrating 20 years of service, the Ohio Supercomputer Center (OSC) is a catalytic partner of Ohio universities and industries that provides a reliable high performance computing and high performance networking infrastructure for a diverse statewide/regional community including education, academic research, industry, and state government. Funded by the Ohio Board of Regents, OSC promotes and stimulates computational research and education in order to act as a key enabler for the state's aspirations in advanced technology, information systems, and advanced industries. For additional information, visit http://www.osc.edu.

Cleveland Institute of Music: The Cleveland Institute of Music is a leading conservatory with students from around the world. Each year, CIM's students, acclaimed guest artists and unsurpassed faculty (including 38 members of The Cleveland Orchestra) bring music to life with hundreds of concerts. CIM's graduates fill the ranks of the world's leading professional music organizations and serve as music teachers. Additionally, more than 1,700 young people and adults take lessons throughout the year. The outstanding faculty boasts many years of experience teaching children, young people and adults, offering private lessons in all instruments, voice and music theory. For additional information, visit http://www.cim.edu/.

FYI: CIM will present Music Modern and uMoving *May 3, 2007, at the Westfield Insurance Studio Theatre Idea Center at Playhouse Square.* Music Modern and uMoving *is a one-hour program that features musical performances, interspersed with interviews, commentary, demonstration and musical/educational interaction with a live audience and high school videoconference sites.*

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OSC is an initiative of the Ohio Board of Regents