

Case Research Computing Newsletter

27 October 2005

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1. SC|05 November 12-18 Seattle, WA

<http://sc05.supercomputing.org/>

2. SDSC offers users a bit of the world's faster computer

<http://www.supercomputingonline.com/article.php?sid=9569>

The San Diego Supercomputer Center (SDSC) announced on October 19 that it is the first academic center to offer users allocated time on the new IBM Blue Gene, which provides the compute power for the world's fastest supercomputer.

3. gridMathematica to be available on the Case pilot HPC cluster

ITS has acquired the gridMathematica product from Wolfram Research for installation on the pilot HPC cluster. The projected date of availability has been revised to November 1, 2005. See <http://www.wolfram.com/products/gridmathematica/> for information on gridMathematica.

4. Sun computers at Purdue University run most comprehensive climate model to date

<http://www.supercomputingonline.com/article.php?sid=9555>

The most comprehensive climate model to date of the continental United States predicts more extreme temperatures throughout the country and more extreme precipitation along the Gulf Coast, in the Pacific Northwest and east of the Mississippi. The climate model, run on supercomputers at Purdue University, takes into account a large number of factors that have been incompletely incorporated in past studies, such as the effects of snow reflecting solar energy back into space and of high mountain ranges blocking weather fronts from traveling across them.

5. Case announces availability of Oracle HTML DB service

ITS is now making available a hosting service for Oracle HTML DB. ITS hosts HTML DB on its servers and provides access via web browser to the research community for a small monthly fee. Please see <http://www.case.edu/its/researchcomputing/databasehosting.htm> for details.

6. Events kick off Center for Computing in Humanities, Arts, and Social Science at the University of Illinois at Urbana-Champaign

<http://www.supercomputingonline.com/article.php?sid=9573>

Two upcoming events will jumpstart a new campus Center for Computing in Humanities, Arts, and Social Science (CHASS), a joint effort of the University of Illinois at Urbana-Champaign and the National Center for Supercomputing Applications (NCSA) that will be based at NCSA. The goal of CHASS is to foster innovation by engaging humanists, artists, and social scientists in sustained collaboration with their colleagues in computer science, engineering, and high-performance computing and communications in order to develop tools to accelerate research and education.

7. North Carolina State's Blondin to present supernova simulations at CEIViz '06 keynote

<http://www.supercomputingonline.com/article.php?sid=9568>

Dr. John M. Blondin, professor of physics at North Carolina State University, will be the guest speaker at the CEIViz '06 awards reception. CEIViz '06 is the first international conference for high-performance visualization. The conference will be held at the Disney Coronado Springs Resort in Orlando, Fla., February 22-23, 2006.

8. News from Vanderbilt's Advanced Computing Center for Research and Education

<http://www.supercomputingonline.com/article.php?sid=9563>

On October 19, Foundry Networks announced that it is providing the core, high capacity infrastructure for Vanderbilt University's Advanced Computing Center for Research and Education (ACCRE). The BigIron RX-16's high availability and high density Gigabit and 10 Gigabit Ethernet architecture allows Vanderbilt to consolidate their infrastructure and scale the growth of their consolidated high performance computing (HPC) cluster.

9. UCD team sees big bay quake by 2025

<http://www.supercomputingonline.com/article.php?sid=9545>

The San Francisco Bay region has a 25 percent chance of a magnitude 7 or greater earthquake in the next 20 years, and a roughly 1 percent chance of such an earthquake each year, according to the "Virtual California" supercomputer simulation. The Virtual California approach to earthquake forecasting is similar to the supercomputing models used for weather forecasting, said John Rundle, director of the UC Davis Computational Science and Engineering Center, who has developed the model with colleagues from the Jet Propulsion Laboratory and other institutions. A previous forecast of earthquake hazards, the Working Group on California Earthquake Probabilities, used records of past earthquakes to calculate the probability of future ones.

10. Florida State University morphology database going global

<http://www.supercomputingonline.com/article.php?sid=9540>

A Florida State University researcher who specializes in the evolutionary history of wasps is now creating a buzz about a new way for scientists to store, share and study plant and animal images. Dr. Fredrik Ronquist, a professor in the School of Computational Sciences, is one of the founders of MorphBank, an international Web database that contains thousands of high-resolution photographs and other images of plant and animal specimens. Now he is leading an interdisciplinary team

of FSU scientists to expand the database, thanks to a \$2.25 million grant from the National Science Foundation.

11. New institute at Johns Hopkins taps computer power to advance medical research

<http://www.supercomputingonline.com/article.php?sid=9533>

On October 13, the Institute for Computational Medicine was launched at The Johns Hopkins University. The Institute will address important health problem by using powerful information management and supercomputing technologies to produce a better understanding of the origins of human disease. Institute researchers plan to use this approach to identify disease in its earliest stage and to look for new ways to treat illnesses.

12. Ohio's Third Frontier Network marks first year

<http://www.supercomputingonline.com/article.php?sid=9529>

The Third Frontier Network celebrates its second year of service with a groundbreaking live demonstration of adding assets to a live, regionally networked beta gaming simulation being tested and monitored at several colleges and university around the state. Interactive presentations from college and university students, academic program directors and industry representatives will illustrate the impact of the TFN on teaching, learning and business in southern Ohio and throughout the state.

13. WSCG 2006 Call for Papers and Participation

W S C G ' 2006 (formerly the Winter School of Computer Graphics)

14th International Conference in Central Europe on Computer Graphics, Visualization and Computer Vision 2006 in co-operation with EUROGRAPHICS. University of West Bohemia, Plzen, Czech Republic, January 30 - February 3, 2006

Topics include computer graphics and visualization, computer vision, image processing and pattern recognition, fundamental algorithms, graphical human computer interfaces, geometric modeling and computer aided geometric design, computational geometry, rendering and virtual reality, animation and multimedia, medical imaging, graphical interaction, object_oriented graphics, parallel and distributed graphics, WWW technologies, CAD/CAM, DTP and GIS systems and others.

for more information contact Prof. Vaclav Skala, c/o University of West Bohemia, Univerzitni 8, Box 314, CZ 306 14 Plzen, Czech Republic.

Email: skala@kiv.zcu.cz with Subject: INFO WSCG 2006. Tel/Fax: +420-37-763-2457. Feel free to visit <http://wscg.zcu.cz> where on-line papers are available (no access restriction) since 1992.

14. IEEE International Symposium on High Performance Distributed Computing - June 2006 - Paris, France - Call for Papers

HPDC'15 - The 15th IEEE International Symposium on High Performance Distributed Computing June 19-23 2006 Paris, France → www.hpdc.org

The Fifteenth IEEE International Symposium on High-Performance Distributed Computing (HPDC) will be a forum for presenting the latest research findings on the design and use of parallel and distributed systems for high end computing, collaboration, data analysis, and other innovative applications. Submissions are welcomed covering all aspects of high- performance distributed computing, Grids, and global computing ensembles. New scholarly research emphasizing empirical and reproducible results as well as investigative expositions of successful application and deployment efforts are particularly encouraged.

15. GridSAM: Web service and JSDL for Sun Grid Engine

<http://gridsam.sourceforge.net/1.0/>

Sites using Sun Grid Engine or other distributed resource managers (DRM) can interface via web service standards and the GGF Job Submission Description Language. GridSAM, developed by the London e-Science Center in a project supported by Sun provides a Web Service for submitting and monitoring jobs managed by a variety of DRMs. The modular design allows third-party to provide submission and file-transfer plug-ins to GridSAM. Moreover the job management API used by the GridSAM web service can be embedded into grid application that requires job submission and monitoring capabilities.

GridSAM is now part of the OMII 2.0.0 release.

16. OMII 2.0 available

<http://www.omii.ac.uk/news/newsdetail.jsp?id=12>

OMII_2.0.0 is the latest release of OMII's web service infrastructure for building grid applications. OMII has focused on providing an open source system that addresses the user requirements of combining ease of installation and use within a secure environment.

- * Server Distribution on RHEL 3.0 and SUSE 9.0
- * Client Distribution on RHEL 3.0, SUSE 9.0 and Windows SP1 & SP2.

17. U. Aachen SunHPC event videos now online

The videos that were recorded during this year's SunHPC event in Aachen, Germany have been postprocessed and are available online now at http://www.rz.rwth-aachen.de/computing/events/2005/sunhpc_2005/

18. Announcement and call for papers for the HPCS 2006 meeting

<http://www.ace-net.ca/events/hpcs2006/>

The 20th International Symposium on High Performance Computing Systems and Applications will be held May 14-17, 2006 at Memorial University of Newfoundland in conjunction with OSCAR'06. The deadline for submission of papers is December 14, 2005. See <http://www.csm.ornl.gov/oscar06/> for information on OSCAR'06.

19. Sun University Challenge

http://www.sun.com/software/solaris/contest/univ_challenge.jsp

Sun has announced a University Challenge. Develop a project on Solaris 10 or OpenSolaris and win cash and Sun technology for yourself (US\$5000 + a Sun Ultra 20 Workstation) and your university (US\$100,000 credit for Sun equipment). See details at http://www.sun.com/software/solaris/contest/univ_challenge.jsp.

20. Microsoft funding opportunity

Microsoft Research anticipates making 15 to 20 awards in the range of \$20,000 to \$100,000 as part of its \$1.2 million "Digital Inclusion through Mobile and Wireless Technologies Research Funding Initiative" announced on October 20. Proposals must be submitted by January 13, 2006. See http://research.microsoft.com/ur/us/fundingopps/RFPs/DigitalInclusion_2005_RFP.aspx for additional details on this opportunity.

For information on the broader set of research funding opportunities at Microsoft Research, see <http://research.microsoft.com/ur/us/fundingopps/default.aspx>.

21. DK Panda to speak on InfiniBand at OSC Statewide Users Group meeting on November 10 in Columbus

Dhabaleswar K. Panda, Professor of Computer Science at the Ohio State University, will speak on "InfiniBand: Where is it headed?" at the next Ohio Supercomputer Center Statewide Users Group Meeting on Thursday, November 10, 2005, in Columbus. Dr. Panda's research group is responsible for developing the MVAPICH (MPI for InfiniBand) software used by over 270 organizations world-wide. Dr. Panda's research

interests include parallel computer architectures, high performance networking, and network-based computing.

Please let Elaine Landwehr (landwehr@osc.edu or 1-614-292-0890) know if you will be joining them for lunch at noon prior to the general meeting at 1 PM. If you would like to attend the meeting remotely, contact her before November 4 so that technical arrangements can be made. See <http://www.osc.edu/sug/meeting/current.shtml> for the agenda, location, directions, and additional details.

22. Megaconference VII set for December 1

The Ohio Supercomputer Center, in conjunction with The Ohio State University and Internet2, will jointly host the seventh annual Megaconference on December 1, 2005. Megaconference is the world's largest simultaneous connection of Internet videoconferencing communication devices.

Please see www.osc.edu/press/releases/2005/megaVII.shtml for the OSC press release and the Megaconference site www.megaconference.org for more information.

The Case Research Computing Newsletter is distributed on the last Thursday of each month and is intended to provide information of interest to researchers in the areas of high performance computing, high bandwidth networking, grid computing, visualization, and other uses of computation in research. To manage your subscription to the newsletter (or to unsubscribe), please visit <https://lists.case.edu/> and select the "RC-newsletter" mailing list. For comments about the newsletter or more information about research computing at Case in general, please contact Roger.Bielefeld@case.edu or see www.case.edu/its/researchcomputing.