

RCNews Fall 2007

CyberInfrastructure

- **Matlab site license** effective Jan 1, 2008. All RIT owned machines and all faculty will now have easy access to the Matlab software package along with 50 toolboxes. Details in Jan.
- **The first 10 Gigabit network** segment for production machines at RIT was enabled between two RC servers. This initial experiment is part of a move toward a fully integrated high performance computing, storage, and network environment for researchers.
- **Condor1000**: a project to harvest the unused computing cycles on idle workstations across campus with the Condor High Throughput Computing system. Research Computing has brought over 842 cores so far into the RC Condor flock from workstations in ITS, CoLA, CoS, IT, CoE, CAST, and Math, which added to the almost 200 cores in the RC, CIS, and CS flocks, brings the total to well over 1000.
- **16 Gigabits per second** of sustained dataflow put RIT was on the winning team of the SuperComputing 2007 Bandwidth Challenge in Reno, NV. Indiana University led an international team with Stephen Simms' (IU) Data Capacitor Project to win with real world data applications, including several terabytes of digital image data from P.R. Mukund's (RIT) Palm Leaf Project. Paul Mezzanini (Research Computing) configured a SunFire x4500 donated by Sun Microsystems, Inc. with the Lustre filesystem to host the data. Jim Stefano (EE) and Andy Elble (ITS) helped round out the winning effort. <http://chronicle.com/wiredcampus/index.php?id=2555>

Collaboration

- **\$471,000** from a Cisco Research Grant will enable Research Computing to develop an Advanced Network Infrastructure for Computing and Collaboration. <http://rc.rit.edu/proposals.html>
- **NYSGrid** hosted CI Days Workshop with Internet2, Open Science Grid in Albany Dec 2007. RIT is a founding member of NYSGrid, a statewide consortium to create an advanced collaborative cyberinfrastructure. Gregor Lazewski (CASCI Dir.), Charles Border (NSSA), Paul Mezzanini (RC) and Gurcharan Khanna (RC) attended to learn and help contribute to the advancement of NYSGrid. <http://www.opensciencegrid.org/osgnews/>
- **Internet2** Fall 2007 Meeting San Diego. RIT is a member of Internet2, a national research and education network. Gurcharan Khanna attended the meetings to learn about middleware, identity management, digital video, and teaching/learning activities; and also moderated a Collaboration Special Interest Group. <https://wiki.internet2.edu/confluence/display/collabsig/Fall+2007+San+Diego>
- **Rochester K-12 Schools** videoconference with NASA/Houston during local Rochester Cmdr. Melroy's Shuttle Mission in December using the Internet2 Commons MCU to connect 10 schools in the area. <http://rc.rit.edu/docs/nasa-vc.pdf>

Community

RC Seminar Series for Fall 2007. Four researchers presented this past term: Karl Baum (Imaging Science), Risa Robinson (Mechanical Engineering), Mary Fran Yafchak & Gary Crane (SURAGrid), and Stefan Preble (Microsystems Engineering). <http://rc.rit.edu/rcss2007-8.html>

RC Seminar Series for Winter 2008. Lined for next year are: Chris Homan (CS) & Nick DiFonzo (Psych), Pengcheng Shi (PhD Dir. GCCIS), and Chance Glenn (ECTET).

Research Computing facilitated biweekly meetings throughout the term both for the Technical Group in the CASCI lab area and for research faculty at Cross Roads for lunch. *Please join up and join us!*

ICELab Activities <<http://icelab.rit.edu>>

The Access Grid venues were used regularly through the term for collaborations and classes:

- Gary Skuse (Bioinformatics) and Anne Haake (CS), who was at NIH in Bethesda, MD, met weekly in the CACSI Conference Room in Bldg. 74 via the Access Grid. Students and researchers from the University of Rochester Medical School joined them.
- Richard Zanibbi (Computer Science) used the Access Grid node in the CASCI Conference Room to meet biweekly with his collaborator, who was in Surrey, United Kingdom.
- Joe Geigel (CS) used Access Grid technology supported by the ICELab for his Virtual Reality class final exam for creating a Virtual Theatre performance. <http://picasaweb.google.com/riticelab/VirtualTheatre>
- Jon Schull (IT) used the Access Grid as a subject for his Interface Design Class. He also deployed an Access Grid node in his new CollaboRITorium space under the library in room A400 to try to connect to other spaces he was creating. <http://picasaweb.google.com/riticelab/InterfaceDesign>

Multiple Access Grid sessions were hosted to facilitate demos, training sessions, outreach, and lectures from abroad. <http://rc.rit.edu/events.inc> and <http://falcon.rit.edu/webPrototype/>