

NAVAL POSTGRADUATE SCHOOL

ITACS

Information Technology and Communications Services

2009

NPS EXTERNAL WEB LAUNCH

The campus launched its new external Web site on Wednesday, March 18, 2009. The site, www.nps.edu. was produced through collaboration of departments and staff at NPS, spearheaded by the Business Solutions Group, who initiated the project by implementing the Content Management Web System partnership with the Dudley Knox Library. Next steps involve filling in missing pieces in the business process, keeping the sites relevant and updated, and teaching individual owners how to build their sites. The new Web site marks a milestone in reaching one of the School's goals of streamlining strategic business processes and practices, and ITACS' strategic goal of implementing the Web Content Management System.

NETWORK SECURITY AWARENESS TRAINING

Compliance of the Information Assurance (IA) training is at 80% for students, and 50% for staff, faculty and contractors on the .edu. 100% compliance has been achieved on the classified and .mil networks.

ITACS continues to seek a solution to the ban on portable media devices/thumb drives. On April 6, 2009, Mr. Chris Gaucher will view a demonstration at the Naval War College of a solution being implemented at the Naval Research Laboratory and NETWARCOM using device lock and an iron key.

Dr. Simson Garfinkel, a member of the IT Task Force, participated in a teleconference with representatives from agencies such as the NSA, NETWARCOM, and the Armed Services, who met to discuss possible solutions. No specific guidance was decided during that meeting.

SAKAI PILOT PROGRAM

Beginning in the spring academic quarter, ITACS be hosting a small pilot program, https://cle.nps.edu. for Sakai, online an collaborative learning environment (CLE). The goal for this new CLE is to offer NPS faculty a more functional online learning environment and a wider range of course-building tools to promote effective teaching and learning. Five NPS faculty members volunteered to teach their spring 2009 resident courses in Sakai:

Doug Brinkley, GSBPP, GB4021: Strategic Management of IT

Erik Dahl, NSA, NS3011: Research and Writing for National Security Affairs

Paul Sanchez, OR, OA4910: Selected Topics in Operations Analysis

George Dinolt, CS, CS4615: Formal Analysis of Cryptographic Protocols

Cliff Whitcomb, SE, SE4150: Systems Architecting and Design

The Information Professionals Center of Excellence (IPCOE), Navy Warfare Development the Command Center for Warfare Innovation (NWDC), the SIGS Technology for Information Operations (TIO) workshop, and a pilot partnership with the CNIC Fleet Family Readiness Training Center (FFRTC) are also piloting Sakai project sites to better coordinate their efforts. Future plans include expanding the pilot program, including more resident and distance learning courses, and developing framework a that promotes collaboration between faculty, PETAL, CED3, ITACS Educational Technologies and the Dudley Knox Library.

If you wish to participate in the pilot program, please contact Nam Nguyen at ntnguyen@nps.edu.



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"GREEN" IT AT NPS

LCDR Simon McLaren has been designated as the Green IT Officer for NPS, and is researching "green" resources and solutions, for both centralized IT and for the campus. Some actions already taken by ITACS include server virtualization, heat-reflective windows in the data center and cold-aisle containment for Hamming, the supercomputer. ITACS also has initiatives underway for an uninterrupted power supply (UPS) replacement for the data center, and is investigating virtualization of some of the Learning Resource Center computers.

SUN MICROSYSTEMS CLUSTER SOLUTION

The High-Performance Computing (HPC) Center received a Sun Microsystems 6048 cluster which was configured with an American **Power** Conversion (APC) cold-aisle containment system. To resolve challenges with the placement and configuration of the APC Power Distribution Units (PDUs) in the cluster's four chassis and eight 50A APC PDU's, HPC staff developed an improved solution of APC, which allowed for easy removal of the subassemblies from the rear of the Sun racks, and the elimination of obstruction concerns, thereby keeping the warranty intact.

To balance the Sun CPU loads to APC's PDUs, the staff used LINPAC, a collection of FORTRAN processes that analyze and solve linear equations and linear least squares problems, and the APC ISX Manager as a metering tool to optimize and balance the performance of the hardware.

APC made notes and took pictures of the accomplishments. The HPC staff's solutions will be used by APC in future Sun installations.

KUALI/RSMART UPDATE

ITACS is working closely to support the Kuali financial systems' project, particularly with the addition of Christopher Axe, an experienced JAVA developer and systems analyst. Kuali provides an open source solution that aligns with academic values, is responsive to institutional requirements, and allows ongoing contact with peer institutions. The system also provides better internal controls, ease of reporting compliance, no disturbance to existing systems while initiating upgrades, and e-authors/e-documents capabilities.

In late March, rSmart briefed NPS senior leaders on the upcoming pilot for the administrative financial systems.

PC SHOP SWITCHES GEARS

For several years, the PC Shop at NPS has been run solely by Ron Del Presto, sincerely appreciated for his selfless dedication; however, under a recent reorganization, the PC Shop has received additional manpower from the Technology Assistance Center. To facilitate our new way of doing business by spreading the workload among several technicians, all PC Shop customers are now encouraged to contact the TAC at Ext. 1046 for assistance.

PARTNERSHIPS AND OUTREACH

At the CENIC Conference, **Mr. Jeff Weekley** of MOVES provided a presentation about 4k content and visualization. Inspired by a presentation by Dr. Larry Smarr, Director of CalIT2, whose project, *Green Light*, is focused on reducing the greenhouse gases/emissions within the IT environment, Mr. Weekley and **Dr. Don Brutzman** are going to write a proposal which will allow MOVES to build a model of Hamming, the NPS supercomputer, and to test its complete cycle and tasks.



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Technology News March 2009

A team from ITACS attended the **CENIC Annual Conference** in Long Beach, CA from March 9-11, 2009. In accord with the conference theme, "Riding the Wave of Innovation", Mr. Jon Russell and Prof. Bob Creasey presented on the TPARC experiment being directed by Professor Pat Harr, in which Elluminate Live was used as a chat box between people in Germany, Switzerland, Taiwan, and Miami, who were discussing the typhoon.

As a result of NPS' participation as active, constructive members of CENIC, the School is gaining visibility within the organization, and has been successful in negotiating a more attractive price for its network connection upgrade.

At the 8th Annual Optical Networked Virtual **Environments for Collaborative Trans-**Oceanic Research (ON*VECTOR) workshop hosted by NTT and Calit2 at UCSD in San Diego, Mr. Doug Weismann of ITACS and Mr. Jeff Weekley of MOVES participated in presentations and discussions related to highspeed optical campus, regional or national deployments and interconnection initiatives related to the CENIC optical grid. Other topics included cloud-computing architectures, including file system and high-speed transport protocol technologies, next generation optics and control planes, and network visualization tools for high bandwidth applications. Mr. Weismann conducted a presentation on the 10Gbps Internet upgrade initiative at NPS, and how ITACS plans to integrate emerging technologies into its upgraded infrastructure to enhance research capabilities.

Dr. Christine Cermak, Dr. Peter Denning and Mr. Joe LoPiccolo met with Mr. Dave Wennergren, Deputy DoD CIO, as well as Mr. Robert Carey, DoN CIO, on March 12, 2009. Issues discussed were phase II of the Rebooting Computing Conference, issues related to the ban on portable media devices, and the possibility of moving the Navy's executive education courses on IT to NPS.

REPORT FROM THE TECHNOLOGY ASSISTANCE CENTER (TAC)

From March 1 through March 27, 2009, the Technology Assistance Center (TAC) received 2,376 requests for assistance, 1,926 of which were resolved by the Tier 1/Tier 2 areas, while the remaining 450 were escalated to groups outside of TAC for specialized assistance. This number represents an 11% increase in requests for assistance from March 2008.

Requests for assistance were categorized as follows:

Phone: 1,091Email: 719Walk-in: 481Web: 85

This month, 68% of all calls were resolved within the Service Level Agreement (SLA). Those that were carried over are awaiting parts, pending information from the customers, etc.

On March 24th, TAC staff provided briefings for incoming students at the New Student Orientation in King Hall. In March, TAC also briefed new faculty in Systems Engineering, and the EMBA cohort. Approximately 120 new resident students began classes on March 30th, creating a flurry of activity in the TAC.