ITACS
Information Technology and Communications Services

Naval Postgraduate School, Monterey, California

Technology News   April 2006

ITACS INSTALLS NEW NPS ERN FIREWALL

On April 19th, Network Operations Center personnel installed and began configuring a new Cisco 6509-E firewall, which is capable of throughput up to eleven gigabits per second and sill support external connection of the NPS Education & Research Network to CENIC's California Research and Education Network. The new firewall has dual Firewall Services Modules, dual power supplies, dual supervisor modules, and 48 switch fabric enabled 10/100/1000 Ethernet ports for local connections. The new hardware and software support multiple firewall instances (virtual firewalls), both IPv4 and IPv6, throughput requirements for the existing CalREN DC connection and the upcoming HPR connection, and can support the next incremental increase in wide-area bandwidth requirements. Both configuration and testing will take place over several weeks. Full operational activation is projected to take place on June 19th.

CENIC CONNECTIVITY UPDATE

The ERN circuit has been ordered by CENIC, and the authorization for use of utility poles will be granted within 30 days. The CENIC connection should be completed in June.

ERN TRANSITION UPDATE

The Graduate School of Engineering and Applied Sciences completed its transition to the ERN network on April 4th. Hermann Hall began its move on April 12th, and included users on the mezzanine, HRO, the chaplaincy, and other small groups with shared calendars. After the mezzanine is completed, the Dudley Knox Library and the Institutes are scheduled to make the transition, followed by students.

EXTERNAL WEB SERVER UPGRADE (BULLNOSE)

The Web Operations staff, assisted by the Server Management group, completed the move of the external military web site (www.nps.navy.mil), a significant challenge since the upgrade involved both the hardware and server operating system which operates 24 hours a day, 7 days a week. To ensure that all sites would be successfully migrated, ITACS staff spent weeks evaluating existing sites and links, as well as testing a migration tool. Only 5% of the migrated web sites had problems, all of which were minor.

NETWORK SECURITY GROUP (NSG) UPDATE

The NSG has completed the rebuilding, reconfiguring and hardware improvement of the Computer Network Defense (CND) tools used on the NPS networks. The new systems are built to the standards used on all the ITACS enterprise systems. The hardware raid configuration has failover capability; the central backup system is being used for backup and recovery of the servers; and cross-training has occurred between the staff for the basic server functions. Six services, including SNORT, FOUNDSTONE, LQFTCRACK, ALARM MANAGER MONITORING TOOLS, SELM MONITORING TOOLS, and STEALTHWATCH, are now operational.

REPORT FROM THE TECHNOLOGY ASSISTANCE CENTER

From April 1-27, the Technology Assistance Center (TAC) answered a total of 2,347 calls, 1,769 of which were resolved by the Tier 1/Tier 2 areas. The 561 remaining calls were answered by other ITACS departments/groups. The TAC staff has also moved 357 machines since the beginning of the Phase III transition to ERN in February.

CONTENT MANAGEMENT SYSTEM PROJECT

The pilot project for the Dudley Knox library, which involves moving the library's website from a manual to a computerized Content Management System (CMS), has begun. Through a collaborative, rigorous evaluation process, Percussion Software was selected to implement the project. On April 17th, two consultants, specializing in modeling and design, visited NPS from Percussion Software to assist with the design phase, identification of content types, architecture information, and proposed work flow of the project. Percussion will document and build the Rhythmyx software, and support the initial implementation of the system. Two staff members from the Business Solutions Group attended training sessions at Percussion Software in mid-April.

STREAMING MEDIA REVIEW

The following events have been streamed:
Thesis Brief – Pam Silva
NPS Grads in Space
The 23rd Annual Technology Review and Update (TRAU) Course

All events can be found at the following link:
http://nps.webcastinabox.com/portal.

To find the webcast in which you're interested, look for the Recent Events and Featured Events section on the right hand side of the page.

RECAP FROM THE NEW TECHNOLOGY AND INNOVATION CENTER

April 7: Mr. Bob Fimiani and **Mr. Ron Ustaff** of Apple visited NPS to discuss their company's Storage Area Network (SAN) technology.

April 10-14: Campus tours: Southern California universities, with Dr. Christine Cermak

April 20: Hosted a demonstration by Cisco of their Distance Learning Management System, including Virtual Classroom, Video Management, and Content Delivery. The meeting was attended by around 20 people representing ITACS, EMBA, Homeland Security, OCL, and Instructional Technology.

April 24: Hosted a visit and presentation of their compliancy/admission control product, and a Q&A session with engineers from Bradford Networks.

PARTNERSHIP AND OUTREACH

During the week of April 10-14, **Mr. Tracy Hammond, Mr. Joe LoPiccolo** and **Mr. Jon Russell** joined **Dr. Christine Cermak** for site visits to several universities in Southern California. The purpose of the visits was to begin collecting information to help in the revision and updating of the IT Strategic Plan. The group visited the ISI Institute, and then USC, where they met with the Dean of Engineering, and previewed visualization technology; attended networking briefings with the CIO at Cal Tech; conducted a follow-up interview with the Provost at Claremont Graduate University, which made a decision to outsource its IT at the time ITACS conducted research for its former IT Strategic Plan; met with the Vice-Chancellor of Finance and Vice-Chancellor of Academic Computing at UC-Irvine; and met with the CIO at Cal State Fullerton, who was an integral part of the establishment of Team IT, a successful program that elevated the visibility of IT on the CSU-Fullerton campus. Mr. Joe LoPiccolo continued to UC-San Diego, where he met with leaders of some of the CalIT2 projects.

Dr. Christine Cermak and **Dr. Fran Horvath** attended a Western Association of Schools and Colleges (WASC) meeting in mid-April. Both Dr. Cermak and Dr. Horvath spoke on "Using WASC Criteria to Frame an Institutional Survey Program."

INSTITUTIONAL RESEARCH UPDATE

In addition to other projects, the Institutional Research office is assisting students with survey design, administration and analysis of their theses. The volume of students seeking assistance is increasing, and now includes students in business, physics, national security and many other areas who are working on topics that include strategic leadership, helicopter brown out landing zones, physical training and more.

NOTES FROM THE IT TASK FORCE MEETINGS

The VPN policy was reviewed and approved by the IT Task Force committee.

Mr. Joe LoPiccolo informed the group that the copier contract, which allows for the 79 aging copy machines at NPS to be replaced by a multifunction machine (copier, printer, fax, scanner), has been reviewed and approved by DAPS. Multifunction machines should arrive on the campus in June or July of this year.

Dr. Christine Cermak reported that at the Executive Council meeting, **Admiral Wells** announced that progress is being made on the establishment of the Navy University, which consists of the Naval Postgraduate School, the United States Naval Academy, and the Naval War College. There is expected to be no governance change; rather, the vision is to become a consortium of institutions that will work together on issues of common priority and represent as a group the issues facing Navy higher education.

The Financial Systems Improvement Committee, led by **Ms. Danielle Kuska** and **Ms. Megan Reilly**, continues to meet weekly, and is making progress on a statement of work to integrate the DORS-DMAS databases.

Dr. Doug Brinkley reported that the Graduate School of Business and Public Policy (GSBPP), has decided that the lab plan for their next smart classroom will incorporate Thin Client technology. Dr. Brinkley has been researching Thin Client prototypes for over a year, and feels that with a life expectancy of 10 years, (versus traditional laptops, which have a lifecycle of 3 years), the fact that there are no moving parts, and that they use one-tenth the power of other systems, the Thin Client system is an excellent investment, and one that is suitable for the GSBPP. Although Sun Microsystems has been largely responsible for supporting the year-long evaluation, Wise Technologies is the system that Dr. Brinkley and his group have recommended. Dr. Cermak said that Thin Client's future applicability to entities such as the Library, Learning Resource Centers, and labs is great, and she thanked Dr. Brinkley and his staff for conducting their research, not only on behalf of GSBPP, but also on behalf of the entire the NPS campus.

The Monterey Peninsula DoD CIO council held its quarterly meeting at the Naval Research Laboratory. Ideas about video collaborative streaming initiatives, the development of programs from local DoD agencies that can be featured on Access Monterey Peninsula channels and expanded to the Pentagon channel, and other marketing possibilities were discussed. It was noted that streaming has the capacity to be a possible platform for training, which will help to leverage costs. DLI is currently working with NPS on instructional content capture and in sharing storage costs. An IPv6 working group was also formed.

Mr. Marc Bergman contacted Dr. Christine Cermak to ask for ideas for student projects. As a result, some student teams will work on the IT strategic plan, wireless deployment, IT accounts management and digitization efforts.

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Dr. Amela Sadagic said that the MOVES Institute, which hosts brown bag lectures for students, has invited guest lecturers to speak on issues such as Internet2. Talks are being developed about how to create exchanges, possibly even full courses, among researchers and scholars at universities that are interested in the topics and work being produced at other institutions. **Dr. Franz Kurfess,** computer science professor from Cal Poly, visited with Dr. Sadagic and Mr. Joe LoPiccolo recently. Dr. Kurfess, who developed a course about the use of Internet2, said he would be willing to return to NPS to meet with faculty and students on this topic. Dr. Sadagic will work with Dr. Cermak to schedule that visit.