ITACS
Information Technology and Communications Services
Naval Postgraduate School, Monterey, California
Technology News April 2007

CENIC

In mid June, NPS will be switching its CENIC fiber connection from our current leased AT&T line to Monterey County Ed-net fiber. With the establishment of a Memorandum of Understanding between NPS and the county, NPS will be able to connect to the Monterey County Information Technology (MCIT) building in Salinas where CENIC has established a point-of-presence to the CENIC 10GB backbone network. In the future, CENIC plans to upgrade their backbone infrastructure to 40GB. At that time, NPS will be able to upgrade its current connection with CENIC from a 1GB to a 10GB connection.

GATEWAY VISIT

The New Technology and Innovation Center (NTIC) met with representatives from Gateway Computers on April 10th to discuss possible future collaboration projects. The discussion centered on NTIC's ongoing and future projects and outlined possible areas Gateway could contribute to those projects. Gateway demonstrated their latest advances which included improved touch technology for their tablet PC line, a new small form factor tablet, and the upcoming release of a new all-in-one computer. Gateway also established a select website that offers steep discounts on the Gateway product line for anyone affiliated with NPS. The web address is: http://select.gateway.com/NPS

REPORT FROM THE TECHNOLOGY ASSISTANCE CENTER (TAC)

From April 1 through April 26 the TAC received 2,193 requests for assistance, 1,800 of which were resolved by the Tier 1/Tier 2 areas. 393 of the remaining calls were answered by other ITACS departments/groups.

REPORT FROM THE HIGH-PERFORMANCE COMPUTING CENTER (HPCC)

HPCC personnel have successfully "revived" King Lear, an IBM p690 SuperComputer located in Ingersoll. Lear is now attached to the high-performance research (HPR) network, has a fresh AIX operating install and up-to-date compilers. This computer will be a testing ground for the larger IBM p690 in the HPCC that NPS received from the Army Research Lab.

The HPCC is expecting the arrival of a 128-processor SuperComputer from the Shock and Vibration Lab, and another smaller cluster from Mathematics. By the end of this summer, the HPCC will be supporting roughly 700 processors.

The ultimate goal of the HPCC is to create a supercomputing "GRID" at NPS, where all of the processors can be linked to solve various problems for different researchers. Once this GRID is established, HPCC staff hope to tie into GRIDs already established at UC Santa Barbara and UC Los Angeles.

Asst. Professor of Oceanography Timour Radko has been performing "double diffusion" calculations (temperature and salinity modeling of the ocean) on his cluster named "Anastasia".

HPCC staff have been installing and providing instruction on the usage of several software packages that have been placed on MAE's 133-processor cluster.

The air conditioning in the HPCC has been replaced, and the room is staying at about 70 degree F. Electrical upgrades will be completed when funding for those repairs is available.

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PARTNERSHIPS AND OUTREACH

Cisco Senior Vice President **Mr. Brad Boston** spent the day at NPS on April 10, meeting with **Dr. Leonard Ferrari** and **Dr. Dan Boger,** and hearing about individual faculty research projects from **Dr. Don Brutzman, Mr. Jeff Weekley, Mr. Jim Ehlert, Dr. Jeff Xie, Dr. Alex Bordestky, and Dr. Dave Netzer. Mr. Bill Warner** and **Admiral Merrill Ruck (ret.)** also attended the day's program, as did six program managers/directors from Cisco. The objective of the visit was to introduce Cisco to the quality and breadth of NPS research and to provide opportunities for ongoing partnership development.

Dr. Christine Cermak is beginning a series of meetings with faculty, staff and students as background information for the development of the second five-year IT Strategic Plan for NPS. If you would like to provide input into the IT Strategic Plan process, please contact Dr. Cermak at cmcermak@nps.edu or at 656.2391.

Dr. Man-Tak Shing and **Dr. Christine Cermak** presented at the annual Western Association of Schools and Colleges (WASC) conference in San Jose, California. The topic of their presentation was *Video Streaming and Web-based Threaded Discussions.*

A videoconference was held on April 11 with the Navy Higher Education IT Consortium. **Mr. Carlos Andreu,** the new CIO at the Naval War College, was introduced, and plans are underway for a meeting at the Naval Postgraduate School in May.

From April 23-25, **Dr. Rudy Panholzer** of the Space Systems Academic Group, and member of the IT Task Force, hosted a short course titled "Technology Review & Update (TRAU) 2007".

TRIPWIRE

NPS has chosen Tripwire as its file monitoring and system integrity solution for all critical servers, lab computers, and network devices. Tripwire is a strict software solution that has the ability to baseline network configurations, operating system files, and registry keys, and uses this baseline as it periodically checks the consistency and integrity of critical files. Tripwire will also collect auditing information, monitor file attributes and file content. Using Tripwire, transparent attributes such as owner, permission control, and hidden properties are readily visible to server management personnel, who also have the ability to determine authorized changes and to revert unauthorized ones. For more information about Tripwire, contact Capt. Curtis Smith at x2096.

AIRMAGNET

Wireless access to the NPS network is closely monitored and scrutinized with the Airmagnet Enterprise system, a software and hardware solution consisting of the Airmagnet Enterprise software package installed on one of the ITACS Network Operations Center (NOC) servers in Ingersoll Hall and 21 hardware sensors spread across the educational buildings around the campus. Airmagnet correlates information received from the sensors to show NOC personnel a comprehensive wireless security view of all wireless activity on and off the network. Detailed information aggregated by the software detects intrusion detection anomalies and security violations. Current sensor deployment is designed for campus coverage and not triangulation. As more sensors are integrated into the system, triangulation of rogue devices will become a bigger part of wireless network security.