



ITACS

Information Technology and Communications Services

Naval Postgraduate School, Monterey, California

Technology News

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Service Interruptions

During **December** and the first part of **January**, power outages and hardware failures plagued NPS, causing computer services to be unreliable. Winter storms brought high winds and fallen trees that took down power lines, causing spikes and power loss. The **UPS** system of batteries and diesel generator that provides emergency power for the campus computer services malfunctioned, allowing servers and network switches to crash. Two major **servers** lost two RAID drives apiece, and had to be rebuilt from backup tapes. RAID drives can tolerate the loss of one drive, as that architecture provides a “hot spare” for fault tolerance, but two failed drives brings down the system.

ITACS staff worked with **Public Works**, the **City of Monterey**, **Dell Computer** engineers, and other service vendors to troubleshoot and repair facilities to reinstate services to our campus customers. Continuing storms exacerbated the problems, causing systems to fail repeatedly. The 1500 amp main electro-mechanical transfer breaker contacts on the **UPS** were fused; the motor drive unit for this breaker also failed. Repairs to the UPS were completed on 8 January. **ITACS** will be investigating additional layers of redundancy for the power over the next few months. **Dr. Christine Cermak** has asked the assistance of the ECE Department to assess the power supply quality at NPS, similar to a study done at University of Connecticut recently, as part of the effort to improve the campus situation.

The **Research Office** loaned **ITACS** server space so that 1 Terabyte of files could be copied from one of the failed servers, and users could regain access to their home directories. Recovery from the RAID failure was a cooperative effort.

We understand the frustration and inconvenience the outages caused for NPS computer users, and thank you for your suggestions and patience during the interruptions. It is our goal to provide stable and reliable network and computer services to all our customers.

CHIPS Articles About NPS

CHIPS, the Department of the Navy Information Technology magazine, features NPS in the upcoming issue due out in late January. **Dr. Peter Denning** and **John Sanders** wrote an article about computing at NPS, and **Dr. Christine Cermak** contributed an article relating to the 50th anniversary of computing celebrated at NPS last year.

IT Ethics

A code of ethical principles for information technology has been drafted by **ITACS**. All computer users need to be aware of the impact of their choices in the workplace and in the community. The draft will be reviewed by the IT Task Force. Briefings about ethical use of computers will be available by request.

SharePoint

The **Research Office** is conducting a pilot project using Microsoft's collaborative software, **SharePoint**. Using **SharePoint** is expected to provide several benefits: server storage space reduction, document revision control, and a single point of information sharing.

The **Research Office's** **SharePoint** pilot project will support student thesis processing, as thesis documents represent the heaviest load on the e-mail system. The prototype is under development and implementation is planned in time for this quarter's thesis processing.

Alan Pires is the IT Project Manager, and **Lonna Sherwin** is supporting the **SharePoint** servers. **Eldor Magat** and **Rhoda Lynch**, technical administrators of the pilot, received **SharePoint** Portal administrator training the second week of January.

Streaming Project

Joe LoPiccolo provided **Dr. Julie Filizetti** a demonstration of streaming media technology by providing streaming for an all-hands meeting 6 January for staff in Monterey, San Diego, Norfolk and Idaho. The CEO of Web Cast in a Box, **Erik Herz**, helped set up the ME auditorium with streaming equipment, and also recorded the event for archival retrieval.

