

# NAVAL POSTGRADUATE SCHOOL

# **ITACS**

Information Technology and Communications Services

TECHNOLOGY NEWS JANUARY 2011

### **CENIC PATH DIVERSITY PROJECT**

In cooperation with Monterey Peninsula College (MPC), Monterey County Information Technologies (MCIT), and AT&T, ITACS' Network Operations Center recently established significant high-speed path diversity to the NPS Educational and Research Network (ERN) provider, the Corporation for Education Network Initiatives in California (CENIC). Working with MCIT, NPS provided diverse "last mile" connectivity without any recurring last mile charges for the connections.

While there was significant value in this implementation, ITACS had determined that there was an additional need to circumvent some strategic points-of-failure in the network infrastructure at NPS; therefore, leveraging new strategic partnerships with MPC and CENIC, ITACS designed, procured, and implemented a significantly diverse path for CENIC DC network connectivity utilizing an independent fiber infrastructure and new external gateways. With sustainability in mind, this additional functionality has come with negligible recurring costs to the providers of these services.

In addition to planned maintenance network outages for software and hardware upgrades, a historical analysis of NPS CENIC network outages over the past 10 years has indicated a frequency of at least 1 event per year due to unplanned external weather, construction, or maintenance issues at off-base locations, making the ERN unavailable for durations from minutes to hours per event. These outages not only affected the entire base operations through lost productivity, but also created significant stress to the teams who maintain these networks.

As more network services move to the "Internet cloud" — including VoIP, video, conferencing, and distributed learning classes — highly available networks are imperative to meet the NPS mission. As a result of the CENIC Path Diversity Project, all of the recent strategic network redesigns and upgrades have created an environment where the NPS networks have multiple high-speed paths to circumvent both planned and unplanned outages from our network providers.

### CYBERSECURITY UPDATE

Prospective members — subject matter experts, ITACS personnel and NPS faculty — will be invited to participate on the Cybersecurity Subcommittee of the Information Technology Task Force which is currently being formed.

A team from a security vendor, FORTINET, visited ITACS to present their Unified Threat Management suite of tools that could assist with a broad set of cybersecurity and privacy requirements across the enterprise including additional e-mail security, sensitive data discovery and protection, and malicious activity correlation and alerting. This promising technology will be further evaluated as a long-term solution at the School.

As requested by NPS leadership, ITACS has begun a periodic audit of hosts on the demilitarized zone.

ITACS met with leaders at the DLI Foreign Language Center's Technology Integration Directorate to determine how to strengthen relationships and improve security management of their servers in the NPS Data Center. Periodic testing of the servers is expected to begin within the coming weeks.



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# MONTEREY PENINSULA DEPARTMENT OF DEFENSE NET FIBER HUB

ITACS Network Operations Center collaborated with the Monterey Peninsula Department of Defense Net (MP DoD-Net) members and the City of Monterey, to successfully move the DoD-Net fiber infrastructure from Access Monterey Peninsula (AMP) to the City of Monterey Corporate Yard in Ryan Ranch. The move included patching and re-provisioning DoD-Net network services at new locations in Ryan Ranch, allowing the DoD-Net fiber infrastructure to be repositioned to a secure upgraded data center facility managed by the City of Monterey, and solving issues associated with AMP's lease with the City of Monterey and MP DoD-Net members.

The new location of the fiber hub includes secure upgraded data center facilities and strategic peering points for MP DoD-Net partners.

### PERSEREC MOVES TO RYAN RANCH

ITACS' Network Operations Center, in partnership with its Monterey Peninsula Department of Defense Net (MP DoD-Net) members PERSEREC and the City of Monterey, provisioned new high-speed DoD-Net services at Ryan Ranch at a site shared with the McGraw Hill Company.

ITACS worked with PERSEREC, the City of Monterey, and their contractors to help define the specific requirements for implementing the high-speed DoD-Net connection between the building at McGraw Hill and the MP DoD-Net infrastructure, and provisioned DoD-Net network services between Heritage Harbor, DoD-Net hub sites, and McGraw Hill to

simultaneously support the PERSEREC DoD-Net at Heritage Harbor as well as McGraw Hill during PERSEREC's transition between sites.

PERSEREC's state-of-the-art data center at Ryan Ranch has the potential to benefit all MP DoD-Net members with collaborative research ventures: the site has a 10Gbps link to the MP DoD-Net, providing access to local and global DoD data center collaborative resources in a secure environment with significant capacity for growth.

#### ENTERPRISE WIKI IS LAUNCHED

Enterprise Information Systems (EIS) is pleased to announce the campus-wide release of Confluence, the new Enterprise Wiki which will facilitate knowledge management, educate through the sharing of ideas, promote participation in discussions, and contribute to campus-wide projects. This web-based collaboration tool has features that include, but are not limited to:

- Easy to use Rich Text Editor
- Building threaded discussions and blogs
- Configuring a personal wiki space and profile
- The ability to track the activities of colleagues
- Creating custom RSS feeds

Access to the Wiki is limited currently to internal users with a NPS account. Wiki support for external Wiki contributors (i.e., individuals who do not have an NPS computer account) is scheduled for February 1, 2011. To begin, log in to the Wiki system at: <a href="https://wiki.nps.edu">https://wiki.nps.edu</a>. The Welcome to Confluence site, which contains information about appropriate use and technical support is at: <a href="https://wiki.nps.edu/display/WELCOME/Home">https://wiki.nps.edu/display/WELCOME/Home</a>



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### CYBERINFRASTRUCTURE UPDATE

ITACS corrected an Exchange 2010 interface problem involving double authentication and an Active Synch malfunction that was detected during testing of the system in January. As a result, ITACs' mailboxes will be moved over the next two weeks, and campus-wide migration will not begin until February 2011.

ITACS expects the migration to last through April 2011, and will post messages to the campus about the process as it nears.

## AUDIO-VISUAL (A/V) SUPPORT

Staff in both audio-visual and the PC shop are merging with two lab support staff to enhance lab and classroom support and services provided by the PC shop.

Faculty who require immediate assistance in classrooms should continue to call the Technology Assistance Center at Ext. 1046. A "hot line" capability, one that will provide immediate and direct staff support for classrooms, is being developed and should be installed in classrooms by March 2011. Signs will also be posted in classrooms directing faculty to the number.

## PARTNERSHIPS AND OUTREACH

The Committee on the Future, chaired by RADM Jerry Ellis (ret.), met for a full day on January 19, 2011 to discuss the status of each of the subcommittee's findings to date. Dr. Christine Haska heads Information Technology, one of ten working groups, and will distribute the chapter for the final report to members of the ITTF for their review and feedback at an upcoming meeting.

## **TECHNOLOGY ASSISTANCE CENTER**

From January 1 through January 27, 2011, the Technology Assistance Center (TAC) received 4,391 requests for assistance. This number represents a 52% increase in requests for assistance from January 2010.

Requests for assistance were categorized as follows:

Phone: 2,711 E-Mail: 1,300 Walk-in: 353 Web: 4

Technician: 23

This month, 95% 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.