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Information Technology and Communication Services (ITACS) ITACS Technology News (Newsletter)

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VIDEO BRIDGE FEATURES

- Improved Video Quality
- Customizable Video Display
- Improved Connection Stability
- Ability to use Cloud-based Collaboration
- Scalability
- Compatible with VTE Classrooms

New Technology Bridges Faculty to Students

The Naval Postgraduate School (NPS) has a rich Distance Learning (DL) program that allows U.S. military and civilian students the opportunity to receive education without being on campus.

The DL program began gaining momentum in the early 2000's, increasing from a few hundred students to over 1,100 in AY2012.

These students require the ability to connect to our talented faculty, via Video Teleconference (VTC) from multiple locations around the world to receive instruction.

To meet the demand of the program, as well as the direction of the DOD to leverage VTC to reduce costs, NPS purchased a state-of-the-art video bridge in 2007. This served NPS well over the years.

In May 2013, ITACS received OPN (other procurement Navy) funding for the purchase of a new video bridge as the current system was past its lifecycle, as well as its capacity. Market research and a needs-analysis were performed resulting in the subsequent purchase of the Cisco MSE8000, a high-density, high-capacity and scalable Video Bridge. Installation and Training occurred throughout December 2013.

The new Video Bridge was implemented to begin the AY2014/Q2 DL academic program.

Benefits to faculty and students:
- Improved video quality
- Improved connection stability
- Customizable video display – faculty can choose what content they want to display
- 33% increase in video ports allowing more flexibility for class time offerings
- Ability to use cloud-based collaboration, an important feature when many applications are involved

Benefits to campus:
- Scalability provides for future growth and increased capabilities
- Compatibility with VTE classrooms, enhancing the video quality and stability

ITACS Offers Enhanced Video Viewing Quality

On March 28, 2014, ITACS debuted the first adaptive bit rate live stream during the winter graduation ceremony. Multi-bitrate streaming feature improves a viewer's experience by enabling the delivery of videos with the resolution and bit rate that best matches the viewer's connection speed.

Multiple video streams were offered simultaneously while the device negotiated the available bandwidth, choosing the best quality according to our customers' bandwidth rate.

The new video streaming is expanding its technology to include mobile devices. iPhones and iPads were the first tested for this technology and it was a success. Viewers were invited to try out the new stream during the ceremony. The "legacy stream," single-bit rate, flash-based delivery, was still offered.

End of Life for Windows XP and Office 2003

In June 2013 NPS faculty, students and staff members who were using Windows XP systems started receiving monthly flyers and e-mail notifications regarding the upcoming security risks and limited network access with XP computers beginning April 9, 2014. Since that initial announcement, Information Technology and Communications Services (ITACS) has upgraded over 500 NPS-owned computers from Windows XP to Windows 7. Support for Microsoft Windows XP and Office 2003 ended on April 8, 2014, making them unable to meet minimum Department of Defense, Department of Navy, and Naval Postgraduate School (NPS) security requirements. Unsupported software applications, such as these, put your PC at risk for harmful viruses, bugs, spyware, and other malicious software, which can compromise PII (personally identifiable information). In order to maintain our network security, computers currently running Microsoft Windows XP operating system may be blocked from access to key university and cloud services, such as: Cisco AnyConnect VPN, Email and Outlook Web App (Webmail), NPS Wireless,

Collaborate Blackboard (formerly Elluminate), Sakai, and other NPS network resources.

Due to the nature of NPS' mission of providing robust research, understandably there will be some exceptions. For example, there may be a research instrument or software package that does not yet support newer operating system versions. In those cases, the point-of-contact will need to write an exception request letter, which must be vetted and approved by the ITACS Director of Cybersecurity via TAC@nps.edu. These exceptions may also be isolated from the network.

If you are still running a NPS-owned Windows XP computer please contact the Technology Assistance Center (TAC) Help Desk at 831-656-1046 or e-mail TAC@nps.edu to schedule an appointment to upgrade to Windows 7.

Personally owned computers, if compatible, may upgrade their operating system for free via NPS' Technology Assistance Centers' Intra-net page, The Technology Assistance Center can assist with this. NPS is a participant in Microsoft DreamSpark Premium and

VMware Academic Programs for active NPS account holders only. There are over 192 applications including Windows 7 and Windows 8 operating systems. Please visit this page for additional details. For additional questions or concerns please e-mail TAC@nps.edu.
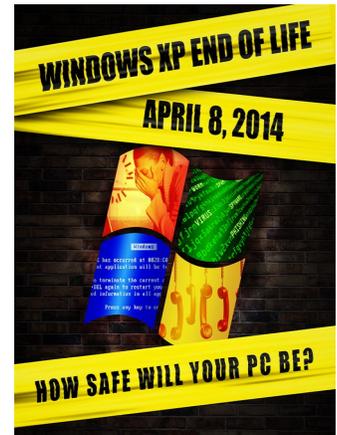
For assistance:

call the TAC at 831-656-1046 or email TAC@nps.edu

First Live 2014 Cybersecurity Awareness Training Event

ITACS hosted the first live Cybersecurity Awareness Training event for 2014 in April. Many interesting cybersecurity occurrences happened over the year both at NPS and in the global Internet community that were

discussed. This training prepares you to protect NPS, as well as personal, systems at home.

Please remember that the threat continues to evolve and become more advanced. Everyone plays an important role in our defense-in-depth strategy and we must be vigilant. If you see something unusual, please report it. Systems must be patched and anti-virus software installed at a minimum.

Everyone is welcome to attend this training as either an alternative, or in addition, to the on-line training

offered via NKO (Navy Knowledge Online) or TWMS (Total Workforce Management Services).

Last year's sessions proved to be very successful, so much so that there were a few occasions when we reached maximum room capacity. In an attempt to avoid this from happening again, King Hall has been booked for each event this year. Please visit https://wiki.nps.edu/x/fJjw for the latest schedule and any last minute changes to the venue.

Send suspicious emails as attachments to abuse@nps.edu

Wired Guest Account Activation Made Easier

ITACS has automated the process of obtaining an individual guest account on the wired Education and Research Network. This access will provide the visitor a wired connection with Internet access without the need for an internal ERN account.

All guest accounts are tied back to a sponsor, who identifies the requirement for the guest accounts and fills out the form located on the Wired

Guest Account Access Request wiki (https://wiki.nps.edu/display/TAC/Wired+Guest+Account+Access+Request).

Information gathered from the form is then reviewed by Cybersecurity, and if there is a mission requirement for the user to be on Guest Wired, the request is approved. From there, an account is created for each individual user with a one-time password that is used for the first login on that account. Accounts are locked until one hour before the event starts, then locked down again one hour after the event, and deleted a day after that.

This solution meets the Cybersecurity requirements regarding individual Identification of guest accounts, as well as simplifying the process and reducing the processing time to obtain a guest account.

For further details about Guest Wired accounts, and instructions on obtaining them, please see the wiki page at https://wiki.nps.edu/display/TAC/Wired+Guest+Account+Access+Request.

Technology Assistance Center (TAC) Stats—April

Help Desk customers are able to contact the TAC in five (5) different ways. This month, 91% of all calls were resolved within the Service Level Agreement (SLA). The Technology Assistance Center (TAC) received 3,666 calls for assistance in the month of April. This is a decrease of 28% compared to the number of calls received during the same period in April 2013. Last year's help desk calls increased due to Cybersecurity Inspection preparation. Out of the 3,666 calls received, 3,230 were handled by TAC personnel. The remaining 436 calls were escalated to other ITACS subject-matter-experts for specialized assistance. Below are the figures:

Routing	April 2014	April 2013	% Change
TAC	3,230	4,149	-22%
Outside TAC	436	949	-54%
TOTAL:	3,666	5,098	-28%

By Priority	April 2014	April 2013	% Change
Urgent:	178	523	-66%
High:	757	1,314	-42%
Medium:	2,164	2,583	-16%
Low:	567	678	-16%
TOTAL:	3,666	5,098	-28%

By Source	April 2014	April 2013	% Change
E-Mail:	1,219	2,047	-40%
Phone:	2,060	2,675	-23%
Walk-In:	344	355	-3%
Web:	0	0	0%
Technician:	43	21	+104%
TOTAL:	3,666	5,098	-28%

Making Security More Efficient for Linux Computers

Puppet, a product of Puppet Labs, is IT automation software. It is a server/client model that provides the ability to automate routine administration tasks, to enforce security policies, and to provide a quick response to critical vulnerabilities.

Motivated by the need to secure campus Linux machines for the approaching Computer Security Inspection last year, ITACS personnel adopted Puppet and developed some basic security modules that could be applied to campus machines. With the help of numerous campus Linux administrators, Puppet was installed throughout the NPS community.

There are 322 Linux systems currently registered, with the goal of full campus participation from Linux users. Linux distributions supported are Red Hat Enterprise, Fedora, Ubuntu, and FreeBSD.

To install the Puppet client on your Linux machine, visit the NPS wiki at https://wiki.nps.edu/display/PUC/Puppet+User+Community or send an email to the Puppet Team at ITACSPuppetLinux@nps.edu for assistance.

In addition to installing Puppet on their systems, system administrators are encouraged to participate in the development of new modules. Sharing solutions can expedite results and avoid duplication of effort. Linux system administrators meetings will be held quarterly, contact the Puppet Team via email to get involved. Puppet can manage MacOSX and Windows too, but is currently being used only for Linux. MacOSX developers are encouraged to join as well.

ITACS Mission Statement

The mission of ITACS is to provide technology and communications support for the Naval Postgraduate School's core mission of teaching, research, and service to the Navy and Department of Defense, and to provide voice, video, and data infrastructure as mission-crucial enablers of innovation and experimentation within the education enterprise.

M A Y 2014

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26 Memorial Day	27	28	29	30	31