



CYBERSECURITY AWARENESS TRAINING

Cybersecurity Awareness Month was first introduced to NPS in October 2009. This year, however, we took a slightly different approach and focused on the individual. In addition to the well-received (entertaining and educational) All Hands Information Assurance training, numerous courses in Digital Signature and Encryption, Password Management, and Social Media were created and presented to small groups of faculty, staff, and students.

On Monday, December 12, we will be offering our family-themed Cybersecurity training event at the Navy Fleet and Family Service Center in La Mesa. Watch for the flyers and register for this and future events.

Building upon this expanded awareness the team put together two wikis - one for campus-wide use and one for internal ITACS and Research System Administrators.

The campus-wide wiki provides information on the latest threat information and how you can protect yourself at work and at home. You can access the Security Center Wiki at <https://wiki.nps.edu/display/SC/Security+Center>. Please visit there often and feel free to comment on your experiences and how we can improve the site.

The second wiki provides all System Administrators on campus with current policies and procedures and an area to manage detailed information about the systems they manage. This wiki also affords everyone on campus the ability to provide the Cybersecurity team with transparency into their systems so that we know what is normal and how best to protect their systems and our network. Additionally, this wiki has provided researchers with the need to host servers on the ERN with a much more manageable method to keep all necessary parties

informed of configuration changes that might impact security or performance of their projects. If you manage systems and need to document them on the new wiki, please contact the Cybersecurity team (IAM_Distro@nps.edu).

VIDEO ENCRYPTION SERVICES

The NPS Video Portal has been available to the campus since November 2009 and has proved itself as a valuable asset to the NPS community.

ITACS and CED3 recently collaborated to develop a new way for content owners to protect sensitive video and audio through the use of a CAC and NPS authenticated system. This technology is scheduled to be first implemented on the NPS Video Portal. This is the first application of using encrypted services for streaming and it has the potential to be implemented to the entire NPS campus and possibly leveraged for DoD and other higher education institutions.

The Secure Video Streaming Service used for the NPS Video Portal is a set of applications that provide secure and authenticated video streaming services for video and audio content owners. The service is made up of two parts, Video Stream Authentication, which ensures the viewer is authorized to view the content, and Video Stream Encryption, which protects the stream across the network from stream ripping software. These two capabilities work together to provide the content owner a way to distribute their content to authorized users only, while being encrypted in real time as the video crosses the Internet from server to the client.

Interest in this service has increased as faculty became more involved with the digital media services provided at NPS. There is a minimal cost to implement this new technology to the campus, which will involve upgrading the Flash Media Server (FMS) currently used for the Video Portal. Other developments for the portal could benefit



from the upgrade, integrating an HTML 5 generator to enable streaming on devices that do not support Flash. This capability is not currently available to the campus, but would ideally be implemented as an automatic feature within the portal in the future.

CLUSTER USERS' FORUM

The Cluster Users' Forum is an informal educational session that provides the setting for students, interns, faculty and other users of supercomputing resources at NPS to share experiences, ask questions and learn more about using high performance computing resources in our environment.

The Cluster Users' Forum is led by Brian Andrus and is held each Monday during the academic quarter from 12:00 - 1:00 in Spanagel Hall room 341. The first half hour is reserved for presentations, the second half hour is for Q&A and any other particular issues users may be experiencing.

These sessions provide a fundamental working knowledge of the tools and applications available on "Hamming", our primary high performance computing cluster. Attendees will increase their knowledge and understanding of available tools, applications, and gain basic skills to get started using "Hamming." For more information send an email to hpc@nps.edu.

SUPERCOMPUTING 2011 (SC11)

Three members of the High Performance Computing (HPC) team, Brian Andrus, Ray Chatten, and Addis O'Connor attended "SuperComputing 2011" in Seattle Washington during the week of November 7th. This is the premier international conference for SuperComputing. It is an important venue to network with other professionals in the HPC

field. The professionals attending the conference represent industry, academia, the commercial sector, and government.

Our attendees gathered information about the state of the art in HPC by interacting with many current vendors, and attending various courses. Ray Chatten attended a seminar on how to make data centers "green", and he is already starting work to head us in that direction. Participants also met with Dr. Gabriele Jost formerly our HPCMOD on-site representative. She now works for AMD and we are looking for possible ways to collaborate with her. Our current vendors were also represented which included: Super Micro, AMD, Spectra Logic, Schneider Electric, Mellanox, Oracle, Intel, and IBM.

HOW TO AVOID BEING PHISHED

Phishing is a fraudulent attempt, usually made through email, to steal your personal information. We've all seen (and some of us have been fooled by) the scams that are sent to our NPS accounts via email. Many of the phishing emails ask us to "click here" to verify our NPS credentials or "reply to this email" with your user name and password. Sometimes, they even ask you to download some file. ITACS (or any legitimate entity) will *never* ask you to verify your information via email.

Recently, the NPS Cybersecurity team has seen more targeted phishing attempts, also referred to as spear phishing. These phishing emails are actually very well-crafted scams--they are fairly well-written, usually appear to come from someone you know (sometimes even an NPS email address), and they are sent to selected individuals (perhaps to a specific research group). These "spoofed" email addresses are very dangerous as you inherently tend to believe the person on the other side of the email is the actual person you think it is.



For more information, tips on how to avoid being phished, and to read the entire article go to <https://wiki.nps.edu/x/CQAEAg>.

PARTNERSHIPS AND OUTREACH

- The search committee for the VP/Dean Research has been established. GSEAS Interim Dean Phil Durkee is chairing the Committee and Dr. Christine Haska was asked to serve as one of the Committee members.
- Dr. Karl van Bibber and Dr. Christine Haska visited Georgia Tech Research Institute, at the request of RADM (ret.) Jim McGarrah, Lab Director at GTRI. The visit was facilitated by two GTRI Board members, RADM (ret.) Jerry Ellis and Tim Richardson. The visit was intended as an initial introduction to GTRI and exploration of ways in which the two institutions might cooperate on projects. The visit will be followed up with a visit by Ms. Colleen Nickles and Dr. Rudy Darken later this month.
- Internet2/EDUCAUSE Network Council – Dr. Christine Haska has been appointed to the national Internet2/EDUCAUSE Network Council.
- Dr. Haska met with CAPT Erika Sauer, the new Commander, of FNMOC to welcome her and invite FNMOC to participate in the upcoming Monterey Peninsula DoD CIO Council meeting on December 8, 2011. CAPT Sauer pledged to send a representative and to participate in the CIO Council activities.
- The Monterey Peninsula DoD CIO Council will be holding a meeting on December 8, followed by a presentation to the Team

Monterey meeting at PERSEREC on December 9.

- Dr. Christine Haska served on the selection panel for the Monterey County CIO. The position was offered and accepted by Ms. Dianah Neff, CIO of the City of Pasadena.
- On November 30th, NPS hosted Goggle for a technology seminar to learn how Google's enterprise products can bring value to the US Navy, Department of Defense, and other Federal organizations. The Goggle presentations were very informative and well received by the attendees. Throughout the day, there were about 45 participants. Attendees included staff and faculty of NPS, a small group from DMDC, two groups from DLI, as well as representatives from CSUMB and MPC. About 15 participants stayed for all four presentations.

The presentations created interest in how the various technologies could be leveraged in the respective missions of our partners.

The **Chromebook** presents an innovative approach to consumer cloud computing, but a compelling use case for NPS could not be seen at this time. DMDC was interested in potentially using Chromebook as a secure user interface to web applications. This would be an enormous win for Google, since they currently do not have a way to CAC-enable the Chromebook, which can only be used over the web.

Search was the most compelling presentation. It is offered as an appliance that can scan the content of over 240 different kinds of file types. The low-hanging fruit is to use the appliance to index all Intranet content and applying some role-based policies over who can access that content. A more complex opportunity is to index knowledge domain specific content to enable very focused search



within a specific academic discipline. Chris Gaucher was intrigued by the possibility of using the appliance to search the H-drive for FOUO or other sensitive content. The library staff expressed an interest in using Google search to index DKL's electronic offerings.

Geospatial has taken Google Earth to a new level. NGA is using it as a way to offer high resolution maps online. The Intel Community is making these tools available on SIPR and JWICS. Google Maps has an extensive API making it easy for non-programmers to create mapping applications. The Oceanography department is already using this technology. DLI expressed great interest in using the maps and the API for language training applications. These could also be used in training and mission planning of Human Terrain Teams and Civil Affairs.

Google Earth Enterprise is offered at an annual fee of \$10,000 for up to 500,000 page views per month. Most intriguing is that Google Earth can save the entire application as a portable mini-app for a specific map region. If you travel to a region that may not have Internet access, you can save and pre-load that regions map to a laptop and use Google Earth as if you were connected to the Internet. DMDC will look at this for the NEO tracking system. Google Earth includes ocean floor maps and can load high resolution maps generated by side-scan sonar.

TECHNOLOGY ASSISTANCE CENTER

From November 1 through 28, 2011, the Technology Assistance Center (TAC) received 4,286 requests for assistance, 3,204 of which

were resolved by the Tier 1/Tier 2 areas. The remaining 1,082 requests were escalated to groups outside of TAC for specialized assistance. This number represents a 27% increase in requests for assistance from November 2010.

Requests for assistance were categorized as follows:

Phone: 2,327

E-Mail: 1,619

Walk-in: 312

Web: 4

Technician: 24

This month, 91% 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.