



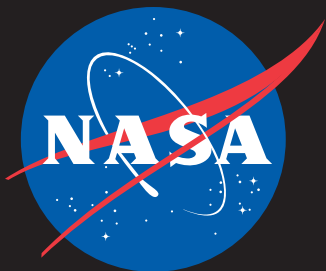
IT Talk

October - December 2015

Volume 5 • Issue 4



CYBER SECURITY AWARENESS MONTH



IT Talk

Oct - Dec 2015

Volume 5 • Issue 4

Office of the CIO
NASA Headquarters

300 E Street, SW
Washington, D.C. 20546

Chief Information Officer

Renee Wynn

Editor and Publication Manager

Eldora Valentine

Graphic and Web Design

Rahsaan Williams

IT Talk is an official publication of the Office of the Chief Information Officer of the National Aeronautics and Space Administration, Headquarters, Washington, D.C. It is published by the OCIO office for all NASA employees and external audiences.

For distribution questions or to suggest a story idea, email:

eldora.valentine-1@nasa.gov

To read *IT Talk* online visit:

www.nasa.gov/offices/ocio/ittalk

For more info on the OCIO:

◆ www.nasa.gov/ocio

◆ insidenasa.nasa.gov/ocio

(Internal NASA network only)

◆ www.nasa.gov/open/

 www.facebook.com/NASAcio



3

Message from
the CIO

5

The Internet of Things

6

Cyber Security
Awareness Month

8

IT's All About the Data

10

I3P Update



I'm very excited about my journey as the new NASA Chief Information Officer. My official tour of duty started September 26, 2015. It's been a whirlwind. I started my tenure with this Agency as Deputy CIO in July 2015. I joined NASA after 25 years at the Environmental Protection Agency.

This new beginning has been thrilling. Larry Sweet has turned over the reins in good working order. It is never easy filling the shoes of your predecessor. Everyone has his or her own leadership and management style. In these last few months, I've learned a great deal about NASA's culture and critical issues and have built relationships with employees and senior leaders. My hope is to continue to provide a solid foundation for the future of NASA's information technology.



Message from the NASA CIO — Changing of the Guard

Earlier this year, the Business Services Assessment (BSA) team recommended that the Office of the Chief Information Officer establish a more efficient operating model that maintains a minimum set of capabilities and meets current and future mission needs. This includes promoting Enterprise Services where feasible, reducing redundancies, addressing service gaps, and maintaining mission unique requirements. It's a challenging task, but I know it can be done.

There's a lot of great work happening in this Agency, and many of the good people are working in CIO offices at the Centers. I'm proud to be a part of this team.

In the coming months, I will be working with NASA leadership and colleagues to formulate my priorities for the next fiscal year. I look forward to receiving input from our team on how we can continue to set a reasonable agenda and deliver good results!

~Renee

Starting October 4, 2015, John T. Donohue will serve as the acting Deputy Chief Information Officer on a four month detail. Donohue comes to NASA Headquarters from Goddard Space Flight Center (GSFC) where he has been the Deputy CIO. John has worked for the Agency for 31 years. He has made many technical and managerial contributions to NASA and Goddard which have resulted in numerous NASA Honor Awards. Welcome aboard John!

Farewell to NASA's Larry Sweet!

Former NASA Chief Information Officer Larry Sweet will retire on November 30, 2015. Sweet has been with the Federal Government for nearly 28 years and is responsible for leading the Agency's information technology efforts and capabilities.

Larry came to NASA HQ in June 2013 as the NASA CIO. He focused on increasing collaboration among the Centers and with the other executive branch agencies, strengthened NASA's IT security posture, identified inefficiencies, reduced costs in current programs, and maximized the use of the Enterprise Service Desk and shared services.

Sweet joined the Agency in 1987 at Johnson Space Center in Houston, TX, where he first served as a contractor and then transitioned to a civil servant and worked as a NASA supervisor and manager until his selection as the Agency's senior information technology executive.

Sweet is originally from Texas and plans to retire there with his wife, Cheryl. We wish him well as he moves on to the next chapter of his life.



3D Printed Gecko Robots That Climb

By Aaron Parness, Group Leader of Robotics Engineers, and Tom Soderstrom, IT Chief Technology and Innovation Officer, Jet Propulsion Laboratory, California Institute of Technology

Robotics researchers at the Jet Propulsion Laboratory (JPL) have been working on biologically inspired climbing robots for several years. These robots use some of the same techniques that insects and geckos use when climbing walls. One day, they could explore the vertical cliff walls and crater rims of inhospitable places on Earth, Mars, the Moon, and other locations.

When you climb walls, every gram counts, so our team tries to find ways to shrink the parts to reduce mass. Three-dimensional (3D) printing has proven to be a valuable tool in this research; it allows the fabrication of lightweight parts out of strong plastic materials that could not be fabricated using traditional machining techniques. The challenge is that it takes a lot of time to do the research, fabricate the robot, and then test it. During the time delays, inspiration and ideas are frequently lost.

To speed up the process in an affordable way, the team had been using desktop-style 3D printers. They are fantastic tools for hobbyists, and the technique helped us visualize and get closer to a solution, but the resolution of the parts was not adequate for the climbing robots. It turns out that human manufacturing is still nowhere near as intricate as the gecko's ability to grow complex microstructures.

So our team ended up sending models to professional 3D printing vendors to meet our resolution requirements, but this incurred a delay of 1 or more

weeks and slowed down the pace of innovation and invention.

The JPL robotics team and Office of the Chief Information Officer (OCIO) jointly tackled this problem and innovated together to bring the right equipment for the right job to the engineers right when they needed it. Together, they found a new Stratasys Connex 2 printer that had the resolution needed for these types of robots while being straightforward to operate. It also filled a multimaterial hole in the 3D-printing ecosystem.

The team also innovated the enterprise support option. They pioneered a new Satellite 3D Printing Service Center. The printer is located in the robotics lab while being supported by the institution. This provides a perfect blend of 24/7 availability to the robotics engineers, availability to the rest of JPL, and complete support by the JPL institution. As a result, design and test iterations that used to take 6 weeks now take 1 day!

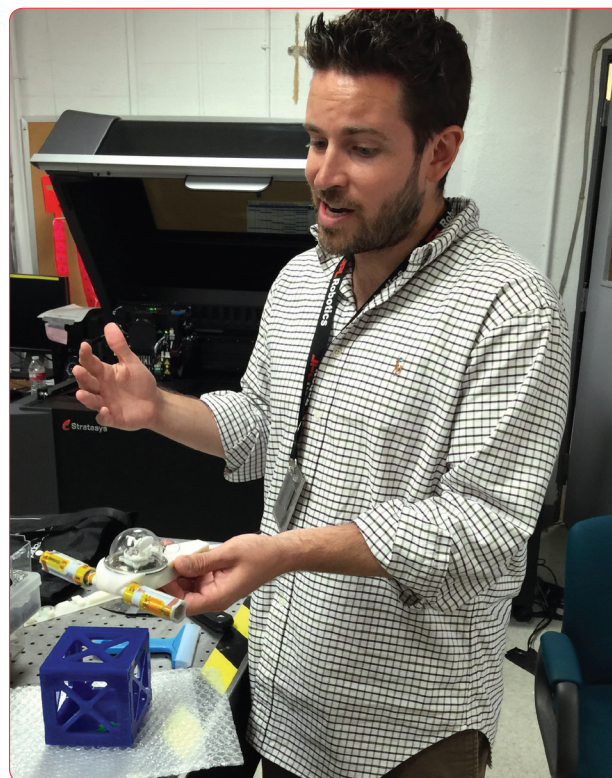
The machine has been running nonstop over the last 3 months (since we bought it), and we have printed more than 1,000 parts in 100 trays. Other projects have taken note too. The equipment has become a resource for many JPL teams, with over 10 different projects making use of the capability.

To speed innovation, getting the right tools into the hands of the engineers was critical to making progress

quickly, and it has resulted in reaching a project milestone. The adhesive technology and many of the newly printed robotic parts were featured in a recent JPL Crazy Engineering episode on YouTube with tens of thousands of views: <https://www.youtube.com/watch?v=6zasTmmR95E>.

The parts also traveled on a recent flight experiment aboard NASA's Reduced Gravity Airplane, the Weightless Wonder, in which the climbing robots successfully drove across flat panels, flexible thermal blankets, and the interior and exterior of a 1-meter cylinder while in free float!

The OCIO and the robotics teams innovated together to bring in an enabling tool, and they put it right where the engineers needed it! They are now thinking about what follows the gecko.



Aaron Parness demonstrates the Gecko Robot

NASA's Internet of Things Laboratory

By John Sprague, Deputy CTO for IT; James McClellan, Tech Infusion Chief; Nick Skytland, Data Evangelist; and David Kelldorf, CTO for Johnson Space Center

The new virtual lab to explore the Internet of Things (IoT) at Johnson Space Center is now in full operation and can be seen at the 1958 Coworker Space (Buildings 56 and 57). The Office of the Chief Information Officer Technology Infusion Team represents a partnership with organizations from across the Agency, now with representatives from Ames Research Center (ARC), Goddard Space Flight Center (GSFC), Armstrong Flight Research Center (AFRC), Kennedy Space Center (KSC), the Jet Propulsion Laboratory (JPL), the White Sands Test Facility (WSTF), Johnson Space Center (JSC), and Headquarters currently participating.

This project is using a variety of connected devices for evaluation. The results of the investigation will be used to develop profiles for the devices, which can be used to assess their value to the end user and the Agency. Phase I of the project will result in a white paper with findings, lessons learned, and recommendations. Due the expansive nature of IoT and the expected large impact on every aspect of our business and lives, the Technology Infusion team plans to move immediately into Phase II of this investigation and will continue to solicit input from missions and programs throughout NASA. In Phase II, we will be using a Gartner template to build a base platform for coordinating and aggregating IoT systems and devices.

The project has also created four subteams to investigate various aspects of IoT:

- Security
- Protocols and monitoring
- Data analytics
- End users' experience

NASA recently had three IoT security and software experts from the MITRE Corporation visit and share insights from across the Federal Government. The MITRE senior researcher, Jay Crossler, said, "NASA should be proud to be a leader in this space—you are one of the first agencies to set up a lab to scrutinize the security and network implications of this flourishing technology. We are impressed with the skill and ingenuity of your team. Thank you for your willingness to share lessons learned on how to get ahead of the coming onslaught of data hitting corporate networks."

More information about IoT efforts and the 16 devices Information Architecture & Management (NIAM) Web site: <https://niam.nasa.gov/portfolio/iot-lab/> (accessible to internal NASA users only).

Internet of Things Research at NASA's Ames Research Center

By Ray Gilstrap, Project Engineer for IT Directorate, AMES

The Information Technology Directorate at NASA's Ames Research Center (ARC) has been participating in the Agency's investigation of emerging Internet of Things (IoT) technologies since February 2015. In collaboration with the Communications Emerging Technologies (CET) lab at ARC, an IoT test bed was established to evaluate the capabilities, performance, and security of IoT devices. As part of the OCIO Technology and Innovation Division's effort to explore IoT capabilities, the test bed will coordinate with IoT labs at NASA's Johnson and Armstrong Centers, as well as with other IoT-related efforts across the Agency.

Initial ARC IoT work focuses on wireless sensor networks for space missions and security for IoT devices. An ARC-led partnership successfully flew a set of low-cost wireless sensors, based on the Institute of Electrical and Electronics Engineers (IEEE) 802.15.4 wireless network protocol, aboard the SOAREX-8 sounding rocket mission in July 2015. This partnership includes the ARC IT Directorate; the SOAREX/TechEdSat missions, led by Marcus Murbach of the ARC Mission Design Division; the Wireless Connections in Space project, led by Rick Alena of the ARC Intelligent Systems Division; and students from several universities. The team is currently preparing an upgraded set of wireless sensors, based on the ZigBee mesh networking protocol, for the upcoming TechEdSat-5 nanosatellite launch from the International Space Station.

Many key IoT work elements were performed by students. IT Directorate interns wrote critical flight software for SOAREX-8, evaluated a ZigBee-to-Internet Protocol (IP) gateway that enables the streaming of sensor data to IP-based servers, and created a new authentication mechanism enabling IoT devices lacking built-in authentication capabilities to be associated with specific users.

The Internet of Things has great potential to enhance NASA missions and projects both on Earth and in space. The collaborative efforts at Ames Research Center, combined with those around the Agency, will ensure that NASA takes full advantage of this exciting new class of devices.

STOP THINK CONNECT

Strengthening NASA's Cyber Security Through Awareness!

Living in the 21st century, we are more interconnected today than ever before. Few of us need to be reminded of the impact that cyberspace has on our lives. From the

kitchen table to the classroom, from business transactions to essential Government operations and services, cyber security is an issue that touches all of us. Recent large-scale data breaches across health-care, financial, and Government-related industries are proof that anyone's information can be a target of malicious attacks. Hackers thrive on gathering user e-mail addresses and passwords.

National Cyber Security Awareness Month is designed to engage and educate, raising awareness about cyber security and increasing the resiliency of the Nation in the event of a cyber incident.

October 2015 marks the 12th Annual National Cyber Security Awareness Month sponsored by the Department of Homeland Security (DHS). NASA is teaming up with DHS to promote awareness and improve understanding of the importance of cyber security in our everyday lives.

Since our way of life depends on critical infrastructure and

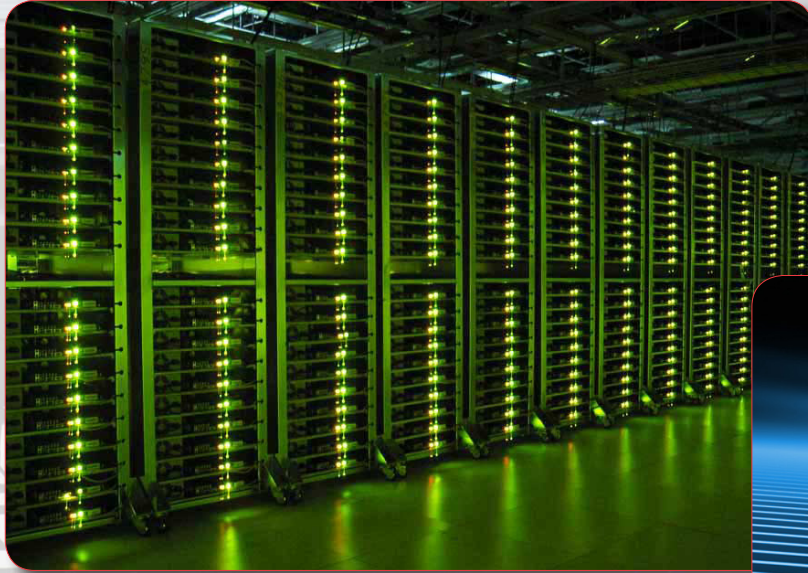
the digital technology that operates it, cyber security is one of our country's most important national security priorities, and we each have a role to play. Cyber security is a shared responsibility that begins and ends with you, the NASA employee. It is critical that we learn how to protect and safeguard NASA information and information systems.

By learning best practices, we will be equipped to better protect sensitive information as well as the NASA IT infrastructure. Every small step toward better understanding of effective cyber security practices helps to ensure that we are improving our IT security posture.

To protect NASA and its data, members of the NASA community are reminded to STOP | THINK | CONNECT:

- **STOP:** Before you use the Internet, take time to understand the risks and learn how to spot potential problems.





• **THINK:** Take a moment to be certain that the path ahead is clear. Consider how your actions online could impact your safety or your family's.

• **CONNECT:** Enjoy the Internet with greater confidence, knowing you've taken the right steps to safeguard yourself and your computer.

The best practices to protect and safeguard NASA's information and assets include the following:

- *Be alert for phishing e-mails; do not click on unfamiliar links.*

- *Never reveal your password to anyone!*
- *Do not include passwords in your e-mail messages.*
- *Lock or log off your computer when away from your desk.*
- *Shut down your computer at night.*
- *Do not send classified, sensitive but unclassified, or otherwise confidential information unencrypted through e-mail.*
- *Choose passwords that are strong, long, easy to remember, and hard for others to guess.*

- *Protect your badge and passwords like you would your house and car keys.*

Remember, no country, industry, community, or individual is immune to cyber risks. For questions or to report any suspicious Agency IT security or cyber security incidents, please contact NASA's OCIO Security Operations Center (SOC), available 24/7 at 1-877-627-2732 (1-877-NASA-SEC) or soc@nasa.gov.

For more information on how to keep yourself, your assets, and your personal information safe online, visit the DHS Web site at <http://www.dhs.gov/stopthinkconnect>.

It's All About the Data

By David Kelldorf, Chief Technology Officer, Johnson Space Center

NASA has been in the information technology business since its inception in 1958. During the last 57 years, computers have evolved from mainframes to desktops to mobile devices. Over that time, security techniques focused on better device management and more-secure network perimeter protection.

Recently, our Federal information systems have been under attack by means of advanced persistent threat techniques, which have caused tremendous amounts of data loss. Even as we continue to work harder at protecting our end devices and networks, the evolutionary method of device management is not adequately protecting our data.

The NASA Chief Technology Officers (CTOs) and Enterprise Architecture Teams are developing a new strategy for NASA to manage its most important asset—the data. The new strategy focuses on a framework of architecture that accommodates the chaotic nature of today's IT. We need a revolutionary way of thinking that addresses our

data life cycle and securely delivers data to any device on any network to provide better services to our business partners as well as our teleworkers. The new framework assumes that every device is untrusted and every network is compromised. The new mantra is "Protect the data, not the device."

This concept is new to NASA, but it is business as usual for the Internet, where neither the device nor the network can be controlled. It pushes NASA to identify and manage our data by using techniques such as grouping, tagging, and monitoring.

Centralizing our data and moving our security controls closer to the data reduce our attack surface and provide a focused touch point for continuous monitoring. Identifying and managing our data will take time and resources, but we need to be able to protect our data today.

To this end, Agency services are being developed for legacy systems that provide secure data access using three paths—the Web,

virtual applications, and machine-to-machine microservices. This framework proposes to right-size our protection of end devices and perimeters with zoning techniques. It will also focus our limited resources on moving data off end devices to reduce the impact of devices' being lost or compromised. This revolution is taking off with two major initiatives at Johnson Space Center (JSC). The first is the Internet of Things (IoT) Lab located at JSC. The IoT Lab provides a safe haven to assess and develop mitigation strategies for managing the risks created by the explosion of untrusted devices now available and a safe haven to test new products "off" the main JSC networks. The second initiative is the data-centric prototype, which is giving us insight into the techniques needed to provide secure access to data from public networks and any device.

These initiatives support the mission of NASA and help ensure that programs will have the information they need for future exploration because it's all about the data.

Identity, Credential, and Access Management Update

There are many Identity, Credential, and Access Management (ICAM) initiatives for FY16. One of the major actions is the next-generation Personal Identity Verification (PIV) smartcard rollout. The new card will hold up to four certificates: encryption, signing, PIV authentication, and card authentication. An Agency-wide Visitor Management solution will be deployed that will replace individual Center Visitor Management solutions and offer one system that will track visitors and visits across

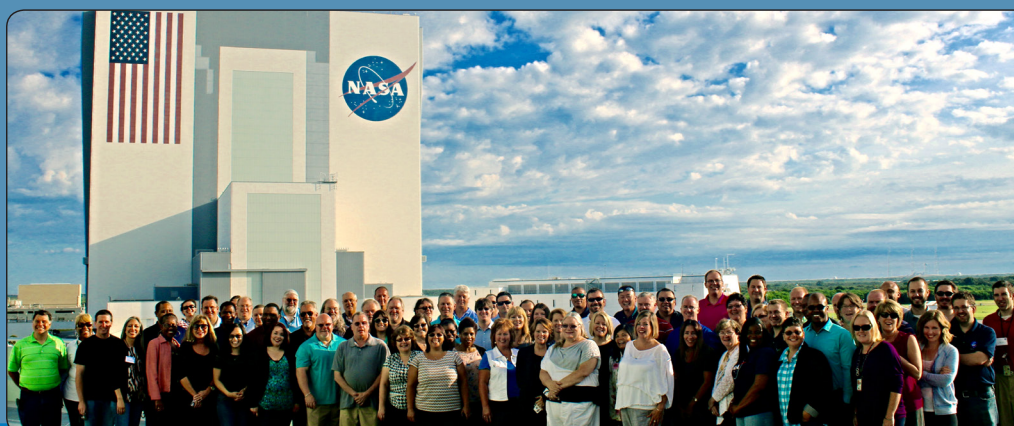
the Agency. Also in the works for FY16 is a NASA "smartcard" for individuals who are not eligible to receive a PIV card (people who will be at a NASA facility for less than 180 days).

Cyber Sprint activities will continue requiring Center ICAM support. ICAM is also continuing to increase the number of platforms that support PIV smartcard authentication. The tools and workflows to support

PIV smartcard authentication for Windows 8 and Windows 10 are currently in work, and ICAM anticipates having a PIV smartcard solution for unprivileged Mac and Linux users in FY16.

Along with the Center ICAM involvement for all of these initiatives, the ICAM subject matter experts and service element technical experts will continue to be involved in all of the Identity Manager 3.0 project reviews.

ICAM Working Group holds meeting at Kennedy Space Center



NCCIPS Now Under NSSC Management

The management and operational control of the National Center for Critical Information Processing and Storage (NCCIPS) facility transferred from Stennis Space Center (SSC) to the NASA Shared Services Center (NSSC) in April 2015. The primary goal is to better align the shared services mission of NCCIPS with the shared services mission of the NSSC.

NCCIPS is a near-Tier III, as defined by the Uptime Institute: a Federal shared services data center designed for sensitive and secure processing and storage. NCCIPS operates under a shared services cost model that calls for the data center customers to proportionally share in the costs of the data center based on each customer's relative footprint.

NCCIPS is a Government-Owned, Contractor-Operated (GOCO) facility supported by the NCCIPS Facility Support contractor (SAIC) and the NCCIPS Government Business Office Financial Support contract (Deltha). NCCIPS's current customers are the Department of Homeland Security

(DHS), the Government Services Agency (GSA), the United States Navy Department of Defense Supercomputing Resource Center (NDSRC), the Department of Transportation (DOT), the NASA SSC Data Center, and the NASA NSSC Data Center.

NCCIPS provides a secure and cost-effective data center solution. There is considerable interest in the facility in conjunction with the Government mandates of the Federal Data Center Consolidation Initiative (FDCCI). NCCIPS management is involved in the Government Technology Research Alliance and is working closely with Federal agencies in marketing the NCCIPS facility and capabilities in an effort to provide the best solution at the most affordable price.

NCCIPS has been operating as a 24/7/365 shared services data center since 2006. In 2010, based on a congressional mandate, NASA successfully transitioned NCCIPS from NDSRC management to NASA management without any interruption of services or adverse impact to NCCIPS customers.

Since 2010, NASA has continually improved the NCCIPS and the shared services model into a state-of-the-practice, near-Tier III data center. The customer base, as well as the amount of leased data center square footage, has increased steadily. The reliability of the data center electrical distribution and cooling infrastructure has improved to its current near-Tier III state. The amount of available fiber backbone, bandwidth, and reliability has increased exponentially. There is now more circuit and carrier diversity available to NCCIPS customers. Continued success compels access to a Working Capital Fund (WCF) for sustainability of capital equipment.

The NSSC operates a WCF to provide for long-term capital investment. Authorization for an NCCIPS WCF project will allow funds to be collected over time and held for the eventuality of replacing critical and expensive equipment. NCCIPS would greatly benefit from access to a WCF for sustainability of the NCCIPS infrastructure.

Larry Sweet and Renee Wynn visit the ESD Call Center



L to R: Kathy Linn, Enterprise Service Center Manager, CSC; Paul Rydeen, ESD Service Office Manager, NASA; Renee Wynn, NASA CIO; Larry Sweet (former CIO); Daniel Harvill, NSSC, CIO.

Below: NASA CIO Renee Wynn takes a call in the ESD, supported by Colt Burkett, ESD Call Agent.



IT Infrastructure Integration Program (I3P) Update

Communications Service Office (CSO)

The Communications Service Office currently has two projects in progress that will improve the security posture of NASA's corporate networks and IT infrastructure and meet Department of Homeland Security mandates.

The Enterprise Internal Border-Network Access Control (EIB-NAC) project's primary goal is to implement and transition users to an Agency-wide network access control solution that will automatically place computing devices and users into network zones. These zones will be based on NASA's established authentication, security, and authorization policies.

Additionally, the project will provide Enterprise guest registration services for guest network access (Internet) and a standard, consistent guest registration service. This will increase operational efficiency and provide a standard set of tools to manage guest access. EIB-NAC will significantly enhance NASA's ability to control, identify, and monitor devices connecting to NASA corporate networks while giving NASA employees, contractors, and guests an Enterprise standard process for gaining access to the NASA corporate networks across each Center.

The Enterprise External Border Protection (EBPro) project's primary goal is to provide improved access, monitoring, and protection capabilities against cyber threats and provide opportunities for consolidation of security tools across the Agency into a centrally managed solution. Both projects are in the design phase and are expected to be deployed in 2016.

Computing Services Service Organization (CSSO)

The OCIO Computing Services Service Organization (CSSO) is pleased to announce the launch of the

Enterprise Managed Cloud Computing (EMCC) website! Information, guidance, and materials on the site, are designed to answer employees' questions about the use of cloud computing at NASA. Visitors are also able to submit a cloud-related inquiry for follow-up by one of our CSSO team members.

While the cloud-computing model continues to evolve, it is already clear "The Cloud" is going to change the way NASA manages and uses information. Every day, more and more teams are learning the benefits of cloud computing. We know there are many questions about how to securely and responsibly use these services, and we believe the new site helps to address these questions.

CSSO has made great strides developing the framework and processes to facilitate the adoption of cloud computing across the Agency. We have been assigned responsibility for managing the heavy-lifting of adhering to the myriad of cloud computing compliance, regulatory, and security details, so you and your teams can focus on your projects and missions. CSSO looks forward to engaging with you to "make the cloud work for NASA." Visit the [EMCC website](#) today, to begin your partnership with CSSO.

End-User Services Office (EUSO)

Computer Refreshes: ACES is beginning computer refreshes this fall, with upgraded seat offerings that provide users with more lightweight laptop options, greater random-access memory (RAM), and more choices to meet their computing needs. The timing for refresh is based on several factors, including the age of a user's computer. Prior to their refresh, users will receive e-mail notifications indicating the actions they must take to engage in the refresh process. During this refresh cycle, peripherals, such as monitors, mice, and

keyboards, will not be replaced unless there is a compatibility issue between old and new devices. This is part of NASA's effort to "green" technology and to be more environmentally friendly. Users are encouraged to study the available computer models and their specifications to ensure that they are making the best choice to meet their needs. For more information about the computer refresh process, refer to ACES Compute Refresh at <https://aces.ndc.nasa.gov/subnav/seat.html>.

Mobile Device Management Implementation Update:

NASA is implementing Mobile Device Management (MDM) to better protect NASA-related information and assets and reduce potential risks to NASA systems. Agency-wide MDM implementation is planned this fall for ACES-managed iPhones, Android devices, and iPads. This will be followed later by non-ACES Government Furnished Equipment (GFE) and personal devices. Going forward, end users receiving a new or refreshed iPhone, Android, or iPad device will be required to complete MDM enrollment upon receipt of the new device. For more information, go to NASA Mobile Device Management at <https://aces.ndc.nasa.gov/subnav/mdm.html>.

OS X Yosemite Upgrades

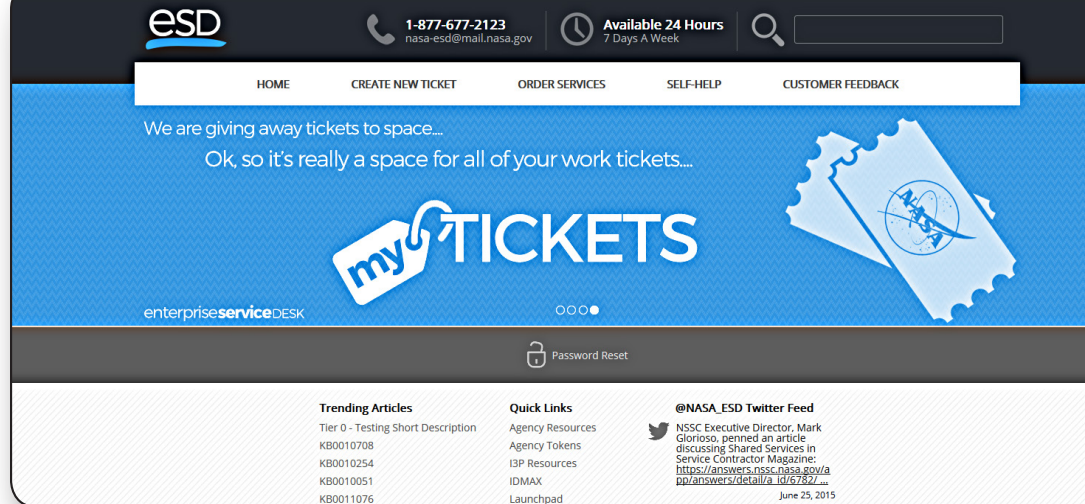
Begin October 2015: Beginning in October, Mac computers running a version of OS X 10.8 (Mountain Lion) or OS X 10.9 (Mavericks) will be upgraded to OS X 10.10 (Yosemite). End users will receive instructions to install OS X 10.10 via Hewlett-Packard Client Automation (HPCA) Self-Service Manager (SSM). Once entitled, SSM enables end users to install the software at a time that is convenient for them. For more information on this OS X upgrade, go to Mac OS X Yosemite Upgrade at <https://aces.ndc.nasa.gov/subnav/os-mac.html>.

Enterprise Applications Service Office (EASO)

The NEACC transitioned from the Integrated Service Request System (ISRS) to the NASA Integrated Service Management System (NISM) in August, allowing the NEACC to better manage upgrades and configurations and to reduce costs associated with managing Service Requests (SRs). The transition to a Commercial Off-The-Shelf (COTS) BMC Remedy System provides a simplified user interface and allows the NEACC to leverage the BMC Remedy suite for service-request assignment, fulfillment tracking, customer-satisfaction metrics, and a full range of service management features. Other significant benefits include optimized system patching and workflow, enabling more accurate trending data for continuous service improvement. The successful completion of this project helps to prepare the NEACC for its next big transition, the start of the EAST2 contract, scheduled to occur February 1, 2016.

The NEACC completed the SAP Business Object (BOBJ) upgrade to Service Pack 6 in August. This upgrade addressed several outstanding issues and provided additional features. The issues addressed and additional features include performance improvements for the Analysis for Online Analytical Processing (OLAP) prompts in the variable entry screen, a resolution for the BOBJ server logoff issue, the ability to export key and text attributes to Excel in separate columns, a resolution for issues with the default for Find/Folder box as it now defaults to Folder, the ability to separate variable values with a semicolon, and the ability to calculate results as summation is improved. The upgrade did introduce an issue where end period/dates for interval type variables are disappearing after the workspace is saved. The NEACC is working with the vendor to have this issue resolved.

The NEACC, Identity Credential and Access Management (ICAM), and NASA Center participants



collaborated to enhance NASA's security posture. In 30 short days, they completed an entire security application design and deployment life cycle at an extremely accelerated pace. Activities included product selection, procurement, formal reviews, infrastructure design and deployment, security and contingency plan documentation, a pilot testing period, extensive communications, user training, and Enterprise help desk knowledge articles. Moreover, the NEACC and ICAM successfully implemented a security software upgrade planned for 90 days in less than 30 days. The fast-tracked implementation included application installation and regression testing across the nonproduction landscape, vendor testing, and deployment planning and coordination. This successful software completion milestone and associated hardware decommission improved NASA's security footprint Agency-wide with minimal mission impact.

Enterprise Service Desk (ESD)

The ESD Tier 0 Web site is getting a new look and feel effective October 5, 2015.

NSSC developers have been hard at work all summer preparing a fresh new look for the familiar ESD Tier 0 Web site (<https://esd.nasa.gov>). Users can expect all the same features they have grown used to, presented in a new way and with enhanced functionality. "Order Services" was updated in June; now it's time to

modernize the rest of the site.

Users will be able to create tickets for themselves and for other employees, request services, view their assets, search our self-help knowledge base, and more—all the familiar features they need to get their jobs done. The new site is very intuitive and user-friendly. Training sessions will be offered the week prior to go-live, and we expect most users to be able to easily navigate the features.

Go-live is currently being planned for October 5, 2015.

Representatives from all Centers were invited to test the new site to ensure that all functionality is in place before go-live. Training sessions are underway, and trainings slides will be posted in SATERN for users who miss the live sessions.

Stay tuned for more information.

Web Services Office (WSO)

For the first time in many years, we were able to develop and deploy a solution allowing visitors of www.nasa.gov to enter the domain name without the "www" and successfully redirect to <https://www.nasa.gov>. Although it may sound like a simple task, the large infrastructure and thousands of subdomains made it challenging from both a technical and policy standpoint. We are thrilled to provide our customers with a better, more modern user experience.

...continued on page 12

...continued on page 12

**Searching for documents?
WESTPrime has the answer
with substantial cost savings!**

WESTPrime deployed an internal Enterprise Search to replace Google Appliances. The search solution indexes millions of documents, provides excellent search results, and saves thousands of dollars. Designed and developed using the Solr and Hadoop frameworks, it was deployed ahead of time under an aggressive timeline with an impending license extension for Google Appliance.

WESTPrime's Drupal-as-a-Service (DaaS) is in production:

Over the past few months, we have launched four new sites to the Drupal-as-a-Service infrastructure: <https://exchange.msfc.nasa.gov>, <https://mcdc.msfc.nasa.gov>, <https://partnerships.msfc.nasa.gov>, and <https://science.msfc.nasa.gov>. The DaaS infrastructure already hosts about a dozen sites, including <http://inside.nasa.gov> and <http://communications.nasa.gov>, and can host about 30 sites in all.

The WESTPrime DaaS infrastructure is proving to be a cost-effective solution and huge savings to customers and stakeholders. The DaaS momentum continues to build with 11 more sites already in development.

Contact Web services at <http://inside.nasa.gov/webservices> for more information.

JPL Web and Mobile Application Development Manager Recognized as a 2015 Rising Star

The Federal Computer Week 2015 Rising Star awards program recognized Evan Chan, manager of JPL's Web and Mobile Application Development group with the Office of the Chief Information Officer. In his role, Chan's leadership, technical, and customer relationship skills have inspired and motivated those around him to excel, from his direct reports and JPL colleagues, to those outside of JPL who have partnered with him. Chan led the successful implementation of JPL's paperless procurement system and the introduction of mobile



and wearable development patterns, allowing JPL to be the first within NASA to deploy a 3D-enabled mobile application environment. He serves as an active participant in outreach activities to students and others with an interest in science and technology and is engaged with local universities to help students prepare for careers in IT.

Chan is the only NASA representative on the 2015 list. The honoree list can be found at <http://fcw.com/articles/2015/09/10/2015-rising-stars.aspx> and the complete profiles for all the 2015 Rising Stars will be available later this year. Chan and his fellow honorees will be officially recognized at the GCN Awards Gala in October.

IT Talk

National Aeronautics and Space Administration

Office of the Chief Information Officer

300 E Street, SW
Washington, DC 20546

www.nasa.gov

