

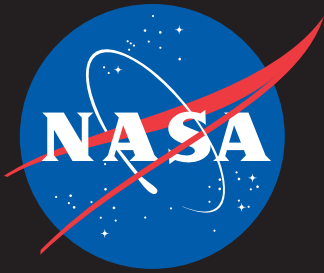
# IT Talk

July - September 2013

Volume 3 • Issue 3



## What NASA's PIV Smartcard Means to You!



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Jul - Sep 2013

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## Office of the CIO

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## NASA Names Sweet As New CIO

Larry N. Sweet is NASA's new Chief Information Officer. Sweet has a long history with NASA. He joined the agency in 1987 at the Johnson Space Center where he has served as supervisor and manager for more than 26 years. Since February 2007, Mr. Sweet has been the JSC Chief Information Officer and Information Resources Director.

Sweet took the helm in leading the agency's information technology efforts and capabilities June 30. He is responsible for ensuring NASA's information assets are in line with federal policies, procedures and legislation.

As NASA's top IT official, Sweet also manages a number of other major IT efforts, including the Information Technology Infrastructure Integration Program (I3P), which consolidates and integrates NASA's IT services to enable collaboration and reduce costs to the agency.

Mr. Sweet began his career with NASA as a Branch Chief in the Center Operations Directorate. He moved on to the Information Resources Directorate, serving as Office Manager, Division Chief and Deputy Director prior to being selected as Director. In addition, Mr. Sweet completed a formal detail in 2002 as Deputy Director in the JSC Public Affairs Office and a rotational assignment in 2005 at NASA Headquarters in the Institutions and Management Office.

Sweet earned a BA in Visual Communications in 1978 from Texas Lutheran University, in Seguin, Texas. ☞

## National Day of Civic Hacking

*By Nick Skytland, Ali Llewellyn, and Sarah Rigdon—Open Government Initiative*

On June 1-2, 2013, more than 11,000 citizens representing businesses, nonprofits, government agencies and local residents teamed up to participate in over 95 events throughout the United States as part of the National Day of Civic Hacking. The goal of the initiative was to improve the lives of citizens by working together to solve challenges facing local communities and the governments that serve them, at all levels.

Building on experience from the planning of the International Space Apps Challenge just weeks earlier, the NASA Open Innovation Program led the public-private collaboration which engaged more than twenty federal, six states, and dozens of local government agencies. Each agency offered challenges and data sets to work on.

NASA's challenge, titled We Love Data, encouraged teams to use its vast open data resources and to help the Agency think differently about how citizens can engage and use spaceflight data. The open ideation challenge encouraged the development of software, hardware, and visualizations.

“We changed the dynamics of citizen engagement, collaboration and partnerships using technology to solve domestic challenges in an unprecedented way,” said Deborah Diaz, Deputy CIO at NASA. “This massive collaboration movement involving federal, state and local government truly connected with all types of interested consumers, experts, youth, coders and interested citizens who want to voluntarily contribute and make a difference.”

The event was one of the largest mass collaborations in US history and the results will be celebrated at the White House Champions of Change event on July 23rd.

Find out more at [hackforchange.org](http://hackforchange.org). ☞



Courtesy - NASA/JPL-Caltech

## Spreading Innovation Without Travel

*By Tom Soderstrom, IT Chief Technology Officer (CTO), Gabriel Rangel, Specialist on Emerging IT Jet Propulsion Laboratory (JPL), California Institute of Technology*

Since 2010, the Jet Propulsion Laboratory's (JPL) Chief Information Officer has hosted industry leaders from Eucalyptus, the Google Driverless Car Program, Netflix, Mitnick Security, the SANS Institute, and Wirth Research, who shared their expertise in big data, cloud computing, cyber security, and innovation with the JPL community. On May 16, JPL CIO, along with JPL's Office of the Chief Scientist and Office of the Chief Technologist, welcomed Stephen Wolfram, creator of Mathematica software and the Wolfram|Alpha computational search engine, to JPL to give a rare talk.

Recognizing what a tremendous opportunity it would be for colleagues outside of JPL to participate in this very special talk, JPL IT Chief Technology Officer Tom Soderstrom and Emerging IT Specialist Gabriel Rangel decided to

test the viability of presenting remotely to other Centers. The IT CTO at JSC, James McClellan, enthusiastically agreed and rapidly organized a remote session at JSC.

The 90-minute talk consisted of a presentation followed by a Q&A session. There were more than 300 people in JPL's largest auditorium and JPLers watching from their office via JPL-TV. High-definition video was sent between JPL and JSC using NASA's network, with about 50 people participating at JSC in an auditorium. In addition, the talk was made available to other NASA IT personnel and Caltech and Embry Riddle Universities via a password-enabled JPL Ustream account over the Internet. It all worked flawlessly.

The talk was also recorded and made available for viewing on JPL Tube and NASATube, enabling users to watch at their

leisure and then search for specific segments of the talk they are interested in, thanks to JPL Tube's and NASATube's automatic transcription and capability to search for words spoken during the talk.

The ability for all NASA Centers to participate in real time in exciting and innovative talks, wherever they are given, is important for our future. Being able to search for the content of these talks and view them at each user's convenience via a capability such as NASATube is also important, regardless of which NASA Center produced the talk or is searching for the talk. It will help drive education of the NASA workforce; influence industry innovators more broadly; and drive innovation much quicker, with less travel, and at significantly lower cost. That is an exciting future indeed. ☘

# Innovation Destination: Johnson Space Center (JSC)

By James McClellan, JSC Chief Technology Office, and Jaumarro Cuffee, JSC IT Infrastructure Integration Program (I3P) Outreach Lead/ITAMS

Nearly 1,700 miles away, Johnson Space Center attendees in Houston were considering ways to apply the ideas presented by Dr. Stephen Wolfram in his discussion that was broadcast live from the Jet Propulsion Laboratory (JPL) on May 16, 2013.

Allison Wolff from the OCIO IT Labs program sees potential in the further development of natural language search interfaces and the use of natural language commands for a code-sharing library to reduce the redevelopment of duplicate code and capabilities. Allan Stilwell,

who manages a Wolfram|Alpha search prototype, sees the potential that these capabilities may have on measuring software health. Stilwell sounded hopeful, noting that “trying to come up with a good base framework could help NASA save a lot of money in the future and change how we make decisions on software releases in general.” Stilwell also manages IT projects, JSC Search, new technologies, innovation, and development in the JSC Information Resources Directorate.

The chief technology officers (CTOs) at JPL and JSC

coordinated the live broadcast of this event. Using existing infrastructure, such as Internet Protocol Television and Ustream, the CTOs were able to multiply the audience at minimal cost.

Reactions to the presentation ranged from seeing a computational search engine as futuristic to seeing it as another tool for enhancing security. The specific benefit may vary among attendees, but the fact that they have been exposed to new and evolving technologies bespeaks the success of the CTO. ☘

## Jet Propulsion Laboratory (JPL) IT Recognized with Industry Honors

By Tom Soderstrom, IT Chief Technology Officer, and Whitney Haggins, IT Communication Specialist, Jet Propulsion Laboratory, California Institute of Technology

The JPL IT Directorate was recognized with two separate industry awards in June 2013.

JPL IT has been named by CIO magazine to the 2013 “CIO 100,” recognizing the organization as “one of 100 innovative organizations that uses IT effectively to create business value.” This is the second time JPL IT has been named to the CIO 100, having been previously named in 2012.

The award recognized JPL IT’s multiyear partnership with the Mars Science Laboratory (MSL) project, part of its initiative of changing IT from “Information Technology” into a proactive, action-oriented organization that innovates with other JPL organizations, NASA Centers, and industry. Working

with MSL, the Mars Public Outreach Office, the Office of Communication and Education, and Television Operations, JPL IT made extensive use of cloud computing for outreach and mission-critical events, allowing easy access for JPL employees and visitors to each other and to the data by providing an unprecedented network access. They also enabled JPL mobile applications, mobile games, and Web site innovations to help tell MSL’s story. JPL IT will be profiled along with other winning companies in the August issue of CIO magazine.

In addition, on June 17, the International Data Group’s Computerworld announced that JPL IT was named to the 2013 list of 100 Best Places to Work

in IT, an annual ranking of the top 100 work environments for technology professionals by Computerworld magazine. This is the first time JPL has won this award. The list is compiled based on a comprehensive questionnaire regarding company offerings in categories such as benefits, diversity, career development, training, and retention. In addition, Computerworld conducts extensive surveys of the IT employees, and their responses factor heavily in determining the rankings.

Jim Rinaldi, Chief Information Officer of JPL, said, “I’m very proud and happy that the innovation, excellence, and hard work of all JPL’s IT employees are recognized by these industry organizations.” ☘

# What NASA's PIV Smartcard Means to You!

By Leslie Cahoon, Service Executive—Identity, Credential, and Access Management, and Rob Winters, ICAM Engineer

With sophisticated password-cracking programs commonly available, passwords alone provide little security in today's information technology environment. This is especially true if hackers gain access to systems where user names and passwords are stored. Federal smartcard credentials such as personnel identity verification (PIV) cards provide multifactor authentication features that mitigate these threats, as well as digital signature and encryption capabilities. This permits workers to access Federal information systems with a much higher level of assurance.

Under the GPRA Modernization Act of 2010 the Executive Office of the President has issued several Cross-Agency Priority (CAP) goals to Federal agencies. [\*The Office of Management and Budget \(OMB\) Memorandum 11-11\*](#) tasked agencies to achieve 95 percent utilization of PIV smartcards for authentication to information systems by the end of 2014. An interim goal assigned to NASA is to achieve 20-percent utilization of PIV smartcard authentication to Windows systems by October 2013. NASA began an Agency-wide Mandatory PIV Use Pilot Program for Windows workstations in November 2012. Currently, there are approximately 240 pilot participants. Beginning in July 2013, each NASA Center will implement its own early adoption program. The Agency will then begin incremental

deployments to mandate the use of PIV smartcards on approximately 9000 Windows desktops and laptops by the end of FY 2013. This will meet NASA's commitment to OMB and put us on the road to full PIV smartcard compliance.

## PIV Smartcard Benefits

### *Additional security:*

- Your PIV smartcard uniquely identifies you, right down to your fingerprints.
- Two factors are required to access your computer: your PIV smartcard and your PIN.
- No password will fall into the wrong hands and be shared across the Internet.
- PIV smartcard can be easily disabled if lost or stolen.

### *Convenience:*

- You never have to change your PIN (although you can if you want to).
- Once you log in, most enterprise applications admit you without another login.
- There are no multiple usernames and passwords (for compliant applications).
- Eventually, the PIV card will replace the RSA token as well.
- One card for guard gate, turnstiles, doors, login, encryption, and signing.

The initial mandatory PIV smartcard use project has several limitations. Only the Windows 7 operating system will have the security controls in place at this time. Workstations used by NASA workers without

PIV cards will be exempted, as will workstations whose function would be impaired by the security controls. Because the restriction itself is on computers and not user accounts for now, you will still have an NDC domain username and password to access noncompliant applications and systems, and you will still need to maintain that password. In the future, all systems and applications will use the PIV smartcard, and you will no longer need a username and password.

After Windows workstations are secured with the PIV smartcard, follow-on projects will be launched to tackle technical barriers to expanded use of the PIV smartcard. These include smartcard login for Macintosh and Unix computers; a strong password-free authentication solution for mobile devices; and unified smartcard capabilities for e-mail, virtual private networks (VPN), wireless LAN, and all other NASA applications and services. Eventually, the PIV smartcard will provide authentication to all systems, networks, and services, as well as guard stations, turnstiles, and electronic door locks. The NASA PIV smartcard will also be enhanced in 2014 to securely hold encryption and signing certificates that cannot be copied from the PIV smartcard. These certificates are currently installed in the Entrust program on your computer and can be easily copied to a USB drive or other media. ❧

## Prepare for PIV Smartcard Login!

PIV smart card login is coming to a computer near you! Be ready for it!

### 1. Know Your Pin!

You set your PIN when you received your PIV smart card. Try to log in to a Windows computer to see if you know it. If you don't know it, go to your Center security office and reset it to something that you will not forget.

### 2. Test Your Windows Login!

If you have a Windows workstation, learn to log in with your PIV smart card and continue to log in that way. If you do not have a Windows workstation, try it on someone else's. If you don't have a working smart card reader on your Windows workstation, contact Agency Consolidated End-Users Services ACES or your information technology service provider.



## Personal Identity Verification: It Gets Easier

*Jaumarro Cuffee, JSC Infrastructure Integration Program (I3P) Outreach Lead/ITAMS*

As the JSC Information Resources Directorate prepares to launch a Personal Identity Verification pilot, active smartcard users were contacted to offer their suggestions and share their experiences with PIV and PIN. Those contacted fell into three categories – PIV pilot participant, optional PIV user and multi-purpose device user.

Both the pilot participant and optional users found the transition easy, if not seamless. For most of them, logging in with their PIN is preferred to using their password. But all of them offered the same caution – remember your password and keep it current.

This group of users reported no conflicts between PIV

and the applications they access. For one optional PIV user, accessing the bReady portal was her primary reason for using her smartcard to login to her workstation. The bReady portal provides access to Integrated Enterprise Management applications, websites and documents. For this user, that is nearly everything she needs.

Though not all of them were initially aware, they all found added convenience in the fact that they can remove their smartcard after they login.

The use of smartcards for PIV on desktops and laptops is widely known, but some multi-purpose device users have found that their smartcard

saves them time at the multi-purpose devices used center-wide at Johnson Space Center. These devices print, copy, fax and scan. If a smartcard and PIN are used, the device will send scans to the user's email address. When a smartcard is not used, an email address must be entered manually. Besides saving time, those users will remember their PIN when it is time for PIV.

As the transition to PIV approaches, some users will be apprehensive about the change. Take a lesson from Annette Moore, Deputy Chief Information Officer for Johnson Space Center, who shares "the more [she's] used it the easier it has become." ✎



## NASA Forms Initiative (EFI)—NASA Electronic Forms (eForms) Migrating to New Application Software

*By John Sprague, Enterprise Applications Service Executive, Valarie King, Agency Business Process and Transition Lead, and Terry Langley, Platform Delivery Manager*

The NASA Electronic Forms System (NEFS) is a suite of tools for filling out, signing, submitting, archiving, and tracking electronic forms using your desktop computer. Many eForms users are aware that the “Desktop eForms” application (FileNet) is at end of life and no longer runs on the latest Mac Operating System (Mac Lion and above). As a result, NASA and Center forms designers have already begun the process of converting NASA’s existing inventory of forms to Adobe PDF format to provide the ability to open and utilize the eForm’s functionality on both ACES and non-ACES Windows and Mac platforms with Adobe Reader installed. At the end of FY12, the NASA OCIO obtained the opportunity to begin the procurement and installation of the new NASA enterprise forms solution, Adobe LiveCycle Enterprise Suite 4 (ES4), to resolve the impacts that the NASA user community is experiencing with the FileNet solution. The NEACC and NASA Center Forms Teams are currently jointly working the EFI project

to stand-up the centralized Agency solution at the NDC. As the Agency rolls-out the new Adobe LiveCycle ES4 solution, Centers have prioritized the most used forms to be converted first, with the rest following in order of usage statistics. The goal is to create all newly requested forms in the LiveCycle solution, and to convert the existing inventories of forms to the LiveCycle solution as additional ES4 components are acquired and Center resources are available to support.

As forms are converted, they will appear on the NASA Electronic Forms site (<http://nef.nasa.gov>) and be available for download. Availability will be indicated with a link labeled “PDF”. Click the link to download the form. If you do not see the link, the form is not yet available in an Adobe format. Viewing and completing the form will require installation of Adobe Reader (version 10 or later), which is included in the NASA standard. Users will continue to be able to fill out, save, and print the forms. At this time, saved eForms will continue

to reside on your desktop or where the eForm is currently saved. The OCIO goal for the future is centralized storage and centralized Records Management. As the NASA eForms infrastructure is scaled to support additional eForms with workflows, the capability will be made available and implemented as required for existing forms.

If you are a MacOS user, you will no longer be able to open previously completed forms in the FileNet format (\*.ifm) after you are upgraded to Mac Lion or above (10.7+). If you wish to preserve previously completed forms, open them in FileNet Desktop eForms application and “Save As” a PDF format. Please note, the PDF saved from FileNet is read-only and you will not be able to modify the data in the form.

For more information or questions please contact your Center Forms Manager listed at <http://server-mpo.arc.nasa.gov/Services/NEFS/Home.tml>. ☛



# New NASA FedTraveler Replacement

By John Sprague, Enterprise Applications Service Executive, and Jean Brantley, E-Gov Travel System 2 Project Manager

The NASA Federal travel system is being replaced with a more commercial-like travel system. E-Gov Travel System 2 (ETS2) will replace FedTraveler later this calendar year and will make booking Government travel similar to booking personal reservations from your home computer system. It is a Government-wide program that is sponsored and administered by the General Services Administration Federal Acquisition Service. The use of ETS2 is required by the Federal Travel Regulation for civilian Federal Government travel.

ETS2 provides a standardized, comprehensive tool to support online booking, travel planning,

travel expense reimbursement, payment processing, credit card reconciliation, and management reporting for NASA. Concur Technologies, Inc., will fully integrate ETS2 with NASA's core financial, human capital, and reporting systems. Training

will be made available for administrators and users in the coming months as the system is configured for NASA use.

For more information or questions on ETS2, please contact [john.sprague@nasa.gov](mailto:john.sprague@nasa.gov) and or [jean.brantley@nasa.gov](mailto:jean.brantley@nasa.gov).



# IT Infrastructure Integration Program (I3P) Update

## NASA Integrated Communications Services (NICS)

The Communications Service Office (CSO)/NICS is working toward the completion of two major projects that will facilitate continued integration of communication services across the Agency. The NICS Consolidated Configuration Management System (NC2MS) will provide a consolidated configuration management system for all services that are managed under the NICS contract. Prior to NC2MS, there were several different tools and processes for the change and configuration management of assets within the communications services offerings. The variety of tools and processes caused inefficiencies and was not aligned with industry best practices such as the Information Technology Infrastructure Library, version 3 (ITIL v3). NC2MS is based on the Remedy Incident Management System and will provide change management, service asset and configuration management, and a common configuration management database. Releases 1 and 2, which transitioned NASA Center services and their configuration items, have been completed. Additional releases for other CSO services are planned, and the projects are expected to be completed by March 2014.

The Consolidated Corporate Network Operations Center (C2NOC) is another Agency-level project that is under way. The goal of this project is to build a seamless, integrated network operations system capable of managing the CSO corporate end-to-end network across all NASA Centers. Benefits expected from completion of the C2NOC project will include a reduction of cost and complexity for CSO communications services, establishment of an end-to-end operations and management structure, and the transition of operational processes to an ITIL-compliant service model. All project milestones through the operational readiness review have been completed, three implementations have been completed to date, and Agency-wide deployment is expected to be completed by December 2013.

The Desktop Mobile Video Conferencing Pilot has been extended to the end of September 2013. Accounts can be requested via the Enterprise Service Desk

(ESD). Click on “Order Services,” then “Collaboration Services, and, finally, select “Desktop Mobile Video Teleconferencing System (ViTS) (offered as a pilot).”

## Agency Consolidated End-User Services (ACES)

**WebEx Upgrade:** WebEx, NASA's current tool for virtual collaborative meetings, was upgraded on May 31. The new version retains the single-sign-on capability from Launchpad and introduced several enhanced features, including multimonitor support on Windows computers, a quick-start page for meeting presenters to easily invite and remind participants or to share their desktop or application, useful keyboard shortcuts, and more. See the ACES Web site for additional information on the enhanced features.

**T-Seat Pilot Testing:** A T-Seat (thin client) pilot is being conducted to assess the suitability of the T-Seat to provide NASA with a virtual alternative to a physical computer, where data and applications are stored in a centralized server environment. One hundred participants are now participating in the pilot. Results will influence future evaluation of T-Seats as a long-term option.

**New ACES Personnel:** New people supporting the ACES contract include Mr. Desmond Kerns-Shepard, a program analyst supporting the End-User Services Office (EUSO) as a contractor with AI Razaq Computing Services. He is based at the Marshall Space Flight Center EUSO in Huntsville, AL.

**Tech Tips:** The ACES Web site contains helpful Tech Tips that provides step-by-step instructions to help you successfully use your ACES IT equipment and make service requests. Items for computing, mobile, printing, and general requests are available. You can find Outlook calendar tips, keyboard shortcuts, and detailed instructions on services such as requesting Data-At-Rest encryption; learning how to delete, reassign, change, or move an ACES seat; and gathering instructions on how to view your assigned assets in the Enterprise Service Request System (ESRS) to name a few. Visit the Tech Tips page on the ACES Web site at <https://aces.ndc.nasa.gov/subnav/techtips.html> for more information.

## Enterprise Applications Service Office/NASA Enterprise Applications Competency Center (EASO/NEACC)

The Project Management Office completed the draft of the Identity, Credential, and Access Management (ICAM) Modernization Project section of the Headquarters Infrastructure Exhibit 300. The Business Intelligence (BI) team is preparing One-Stop Shopping Initiative (OSSI) Year 2, which will report in a new format that is based on the one used by Jasper Soft. In response to security vulnerabilities in the former Office of Education Lines of Business, the OSSI Development Transition from Cold Fusion to Railo was completed. A task order modification was initiated to incorporate new requirements for the Office of Education's Performance Measure, including project management enhancements and integration of financial data. The financial team continues to support various Agency initiatives, including the Reimbursable Process Improvements, Performance Measure Management Extension Module (PMME) Phase 3, Phasing Plan, and Budget Structure Remapping. The team supported two reviews with the Center/Agency team in an effort to obtain consensus on requirements for the Lower-Level Cost Collector tool and Raising the Level of Obligation initiative. The Enhanced Procurement Data Warehouse team updated the PRISM Reporting Category Extract/Transformation/Load process to account for a change with the new PRISM 7.1. The team has a recommendation for Electronic Position Description System Data Architecture Restructuring to be presented to NASA Headquarters and the Procurement Functional Control Board.

## Enterprise Service Desk (ESD)

The next ESD Quarterly release is scheduled for mid-August. Development efforts for the release are underway and the team is excited about the upcoming enhancements. Some of the new capabilities include the ability to search incidents and service requests by ticket number, contact name or by customer name; a resolution to timeout issues at Tier-0 to improve end-user experience with ESRS and the APC; and, the addition of APC order details in ESD email notifications sent to our end users. Be on the lookout for new training tools and outreach for these enhancements.

The ESD is also preparing for the next release slated for November 2013. The team is currently preparing for the ESD Service Board's top three priorities: update emails for closed incidents to assist with survey completion, notification to P-Card holder upon closure/completion of a service request and "On Behalf Of" Incident Response Procedures to allow the ticket submitter to distinguish between Customer, Contact and the Submitter of the ticket.

This will allow the individual submitting an incident ticket to indicate the appropriate point of contact for the ticket to ensure ESD and the I3P service providers are talking to the right person in reference to the ticket..

The ESD Service Board will vote in September on their priorities for the February 2014 ESD release.

### **ESD Face-To-Face Held**

The ESD Face-To-Face (F2F) meeting took place at Johnson Space Center June 11- 13. The ESD Service Office Manager, ESD Service Executive, Communications Service Office Integration Leads (SOIL) and all ESD Subject Matter Experts (SMEs) participated to discuss, identify and to resolve ESD related matters.

Desktop Vidyo was used as an effective tool for collaboration and participation in addition to the WebEx. The ESD Service Executive and other ESD SME's leveraged the tool for virtual presence at the F2F.

Items addressed at the F2F were: What does the Service Office need the SMEs to do to ensure quality service delivery at the Centers? What do the SMEs need the Service Office to do to ensure the same? What processes and procedures are working well? Several action items were identified. ESD SMEs received training on Remedy Incident Management System and Analytics Reporting. The ESD extended their invitation to participate to all the I3P SOILs, Service Offices, their SMEs and the Center Integration Leads community. The ESD Service Office captured the week's discussion and is already reviewing the actions with an eye toward continuous service improvement.

### **Web Services and WESTPrime**

NASA has awarded InfoZen the 4-year Web Enterprise Service Technologies

(WESTPrime) contract to grant NASA the Agency-wide capability to maintain and manage Web sites in the cloud. NASA's Web infrastructure—currently distributed throughout the United States across 10 Centers and several satellite facilities—will be consolidated on a cloud-based enterprise infrastructure that will offer infrastructure as a service, platform as a service, and software as a service for all internal and external Web applications.

WESTPrime uses Amazon Web Services (AWS), a proven cloud-computing solution that supports rapid application deployment and migration. AWS is an open-source technology with the ability to scale services up or down automatically according to changing business requirements. AWS will provide a secure, highly available hosting environment for NASA applications and utilities that are used to deliver content across all NASA Centers and the Federal Government as well as to the general public worldwide.

External applications—those Web sites available to the public over the Internet—will be hosted in the public AWS cloud. Internal NASA applications will be accessible via the Virtual Private Cloud (VPC), configured to deny public access, with access to NASA networks via a dedicated connection over a VPN or AWS direct connect circuit.

The Portal, [www.nasa.gov](http://www.nasa.gov), will have a totally new architecture based on cloud technologies, and it is designed to handle a significant load and defend against security attacks. Other sites, including the popular [science.nasa.gov](http://science.nasa.gov) / [ciencia.nasa.gov](http://ciencia.nasa.gov) Web site, will initially be migrated to the cloud "as is," although they will leverage AWS features wherever possible and will evolve over time to a much more cloud-oriented architecture.

InfoZen is working with NASA's Office of the Chief Information Officer to develop a comprehensive risk-based cloud security program based on NASA, Federal Information Security Management Act, and Federal Risk and Authorization Management Program standards and requirements. The WESTPrime cloud utilizes AWS Identity and Access Management, which enables secure control access to AWS services and resources for end users. ❧

## **Exchange 2010 Upgrade**

NASA Operational Messaging and Directory (NOMAD) service is in the process of upgrading to Exchange 2010. User migration started on July 2 with a late-August completion date. As users are migrating to Exchange 2010, their mailbox size will increase. Most users will receive a default mailbox size increase from 400 megabytes to 1 gigabyte. Up to 10 percent of users will receive a default mailbox size increase from 1 gigabyte to 2 gigabytes. The project is on schedule and had a successful operational readiness review on June 24.

After the migration to Exchange 2010, temporary mailbox size increases will no longer be allowed. Once the maximum mailbox size is exceeded, e-mail messages will not be sent until the mailbox size is reduced below its limit. An automatic system-generated e-mail message will be sent to users as they get closer to reaching their mailbox limit. Additionally, Exchange 2010 has a new feature that provides quota information on the customized status bar.

Although mailbox sizes will increase, mailboxes should be managed to ensure that space remains available. Suggestions for mailbox management include moving items that have already been sent from the folder on the server to the local workstation, emptying the deleted items folder on the server, and archiving older e-mail messages.

Additional information on mailbox management is available at <http://nomadinternational.nasa.gov/nomad/default.html>. ❧



Michael Porterfield recently won an Inhouse Design Award from *Graphic Design USA Magazine* for his redesign of the *IT Talk* Newsletter. Michael is a contractor for Media Fusion (CSSC). July marks his third anniversary with the Office of the CIO.



The OCIO staff says thank you to NASA's Associate Deputy Administrator Rick Keegan. From April to June 2013 he served as acting Chief Information Officer upon Linda Cureton's retirement.

National Aeronautics and Space Administration

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