OCIO connections A Tale



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Holidays!
December 24-25

Happy

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Winter Solstice

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of 2 Legacies: ACIOs Suda & Rundle Announce Departures

In a year of changes, there are two more: Bob Suda leaves OCIO for the Department of Transportation Volpe Center and Kathleen Rundle will retire as ACIO-Operations in Jan. 2008.

Bob Suda: Strategic Integration to better serve all USDA...

Bob Suda arrived in 2006 to provide an outside perspective on combining the operations of NITC, TSO, and ITS. He departs as first ACIO for Integration & Operations (I&O), officially unifying these three groups to present a single IT operations and support organization to our customers. I&O is both a vision of USDA's information technology (IT) future and a methodical way to implement it.



Photo: Bob Suda, ACIO-I&O (photo by Spector).

The Strategic Path - "On the one hand," Bob Suda explained, "I&O represents a strategic path for optimizing our expertise, workforce, technical resources, and national presence to better serve our customers across USDA." Bob sees his legacy as bringing momentum and unity to OCIO's I & O, making it tangible, clear, and motivational for customers, employees, leadership, and managers.

In many ways, this strategy is optimizing what we've learned over the last three years, since the convergence of ITS, in terms of coordinating the efforts of ITS, NITC, and TSO. As Bob says, "It addresses the reality of tighter budgets and more responsibilities."

Kathleen Rundle: Synchronizing Operations & Streamlining the I&O Process



Photo: Kathleen Rundle, ACIO-Operations, (photo by Steve Spector).

After a career managing over thirty years of IT change, Kathleen Rundle has been formalizing and streamlining the I&O process.

"My challenge," she says, "was to integrate the operations parts of OCIO – NITC, TSO, and ITS – to simplify how USDA agencies work with OCIO to get comprehensive IT services and support. Instead of what might appear to be three distinct service and technology groups, I&O now presents one face to the customer. We are leveraging our groups' strengths and working relationships, breaking down stovepipes, and providing our customers the highest quality services."

The I&O Outcome >

We already have proof of the value and momentum of change. It includes:

- ➤ The efficiencies of a Common Computing Environment (CCE) and the many capabilities emerging from managed change, interoperability, and automated deployment capabilities.
- Leveraging economies of scale to benefit all USDA agencies and employees.
- A highly skilled and responsive workforce capable of supporting diverse systems across USDA and guiding the 29 agencies into the secure and up-to-date IT environment of the future.

Peggy Knight Receives Award from CIO

By Kathy Marshall, (retired)

On September 14, 2007, CIO Chuck Christopherson honored Peggy Knight of the Iowa ITS-Technical Support Division Team with a spot cash award to thank her for recognizing key software vulnerabilities associated with the Service Center Information Management System (SCIMS) database.

Commenting on Peggy's actions, Christopherson commended her and said she mitigated a likelihood of unauthorized access to our USDA customers' personal information. One could say she is what Secretary Johanns referred to in his farewell speech last September when he spoke of USDA being the greatest agency in the government because the employees are so great.

Peggy described what happened, "On August 28th I was notified by Joseph Wagner, NRCS Iowa District Conservationist, concerning a vulnerability associated with SCIMS database. I checked this out and it was evident that the issue should be escalated urgently." Peggy notified her supervisor, Dennis Carlson, of the need to block the security risk and he, in turn, immediately escalated the request to secure SCIMS.

"The process worked flawlessly not just because of my efforts but because a group of people worked well together to get the job done," Peggy said. It shows that security awareness and follow-through is truly an achievable Department-wide responsibility.

Peggy Knight and the others involved are excellent examples of the dedicated people working in OCIO and contributing to the success of USDA. We congratulate Peggy on receiving this award and preventing what could have been a very bad situation.

Service Center Information Management System (SCIMS) Database

The SCIMS is a repository of customer information for the three Service Center Agencies (SCA) - Farm Service Agency, Natural Resources Conservation Service, and Rural Development. A Web-based user interface provides for maintaining customer information.



USDA FY08 Computer Security Awareness & PII Training-

Deadline: OCIO Employees & Contractors DEC. 31, 2007

OCIO - Cyber Security wants to make sure all USDA employees and contractors know they are required to complete the USDA COMPUTER SECURITY LITERACY BASICS AND PRIVACY BASICS Course. Available since October 1, 2007, the training modules for the computer security awareness and privacy basics courses have been added into the AgLearn Learning Plan for employees. It is accessible at http://www.aglearn.usda.gov.

Agency training progress will be tracked in AgLearn and reported on the monthly Cyber Security Scorecard. Kathleen Rundle sent a message to all OCIO employees and contractors stating that the training is to be completed by December 31, 2007, even though other USDA employees have until March 31, 2008, to complete the training.

QUESTIONS? PROBLEMS? Please call us.

If you have any questions or concerns regarding the training, please email cyber.communication@usda.gov or call 1-877-299-8329. For problems with new or restored passwords, contact eAuthentication via email eAuthHelpDesk@ftc.usda.gov or call 1-800-457-3642.

Employees requiring compact disk or paper-based training should contact their Information System Security Program Manager (ISSPM).



Identity theft - One of the fastest growing crimes in the country. The public's concern increases as each new data breach hits the news.

Personally identifiable information (PII) is exactly what identity thieves look for – the information that enables them to steal someone's individuality by learning his or her Social Security number, date of birth, mother's maiden name, address, and other key information. So, if you see PII unsecured, please protect it like it's your own!

COMING IN OCIO CONNECTIONS #3 - JANUARY 2008 -

FROM CYBER SECURITY -

INFO ABOUT SECURITY AWARENESS MONTH & THE FEDERAL DESKTOP CORE CONFIGURATION (FDCC)

FROM ITM -

LINCPASS & AGLEARN

FROM I&O -

FIELD PERSPECTIVES: THE MINNESOTA TECHNICAL SUPPORT DIVISION TEAM

FROM ITS ADMINISTRATIVE MANAGEMENT DIVISION-

HATCH ACT REMINDER &

USDA AT 2007 B.I.G. CONFERENCE

AND MORE....



Financial Planning

- Planning Your Personal Finances Simulation
- · Late Savers Guidebook
- Financial Planning for Couples Simulation
- Managing Your Cash Flow and Credit
- Tax Planning

Retirement Planning

- Planning for a Secure Retirement
- Pre-Retirement Planning for FERS
- Pre-Retirement Planning for CSRS
- Planning for Retirement and Retirement Accounts

Click here for more information: http://www.aglearn.usda.gov/popLearner.html

Integration & Operations News

TSO prepares way for Networx, the Next Telecommunications Contract By Paul Jurasin, TSO-FTS2001 Transition Manager and Steven Weinert, TSO-TMACO

Planning Underway for Implementation in Late 2008

USDA is in the midst of planning for the implementation of Networx, a new 10-year government-wide telecommunications contract that will replace the existing FTS2001 telecommunications contract. The Networx program offers comprehensive, best value telecommunications. It will provide for new technologies, industry partners, and ways to achieve a more efficient and effective Government. Networx allows agencies to focus their resources on building seamless, secure operating environments while ensuring access to the best technology industry has to offer.

The transition of government agencies from the FTS2001 and crossover contracts to the Networx contracts could be the largest telecommunications services transition ever undertaken by the federal government. It will involve more than 135 federal agencies, more than 50 services, and thousands of voice and data circuits. The USDA portion of the transition will require detailed coordination between GSA and a host of telecommunications contractors. Each USDA agency and the Department as a whole have identified Transition Managers who will facilitate this coordination and ensure that the transition proceeds as smoothly as possible. With Networx, USDA can proactively respond to new and future telecommunications needs.

The Networx Program Will Provide:

- Service continuity all services to all locations that are currently on the FTS2001 and Crossover contracts.
- Competitive prices overall below current FTS2001 prices.
- > **High quality service** reliable and efficient service to meet customer agency mission.
- Full service offerings a broad array of services and the ability to expand services throughout the life of the contracts.
- Alternative sources access to a broad spectrum of industry service providers, including the major telecommunications companies.
- Operations support ordering, billing, and inventory management functions.
- > Transition support timely and efficient transition coordination and assistance.
- Performance based contracts Service Level Agreements to ensure contractor performance and quality of service.

NITC Achieves Data Center Energy Efficiency Goals Ahead of Schedule

By Jim Steven, NITC-PMO & Steve Spector, ITS

The Energy Policy Act of 2005 (August 8, 2005), established the importance of improving energy efficiency. It specifically challenged data centers to be in the forefront of such efforts, with the government leading by example.

Since 1996, NITC has been pro-actively involved in evaluating new technologies and implementing more energy efficient solutions for its infrastructure systems and computing environments. When the Act accelerated energy consumption reduction goals to 2% annually, NITC was able to reprioritize many infrastructure upgrades to meet these goals.

EPA wants data centers to achieve PUE ratios of 1.7 by 2011. NITC has already achieved an average PUE ratio of 1.69 (with a worst case PUE ratio of 1.88 during hot days with greater demand on cooling). By implementing

Power Usage Effectiveness (PUE) is the term for measuring efficiency improvements. The total power used by a data center (including IT systems, heating/cooling system, generators/back-up power system, lighting, etc.) is divided by the power used by just the IT system components (servers, computers, & associated components).

additional technologies and practices, NITC estimates that it can achieve a PUE ratio of 1.6 or less by 2011. The boxes on the right show both the complex combinations of actions that have resulted in these reductions and the future actions needed to continue our anticipated progress.

What this means in the long run and in the real world is significant. The Act wants government to prove the reductions are possible and practical. Congress commissioned the Environmental Protection Agency to study the topic. The EPA Report to Congress on Server and Data Center Energy Efficiency (August 2007) verifies the policy's importance. We'll see the cumulative impact of NITC's achievement as other agencies and companies across the country join in similar efforts to save energy and reduce greenhouse gases.

Excerpt from EPA Reports Significant Energy Efficiency Opportunities for U.S. Servers and Data Centers (EPA press release, 8-03-07)*

...A new EPA report shows that data centers in the United States have the potential to save up to \$4 billion in annual electricity costs through more energy efficient equipment and operations, and the broad implementation of best management practices...

The report findings include:

- Data centers consumed about 60 billion kilowatt-hours (kWh) in 2006, roughly 1.5 percent of total U.S. electricity consumption.
- The energy consumption of servers and data centers has doubled in the past five years and is expected to almost double again in the next five years to more than 100 billion kWh, costing about \$7.4 billion annually.
- Federal servers and data centers alone account for approximately 6 billion kWh (10 percent) of this electricity use, at a total electricity cost of about \$450 million per year.
- Existing technologies and strategies could reduce typical server energy use by an estimated 25 percent, with even greater energy savings possible with advanced technologies.

ENERGY POLICY ACT (EPA) OF 2005

42 USC 16212.

SEC. 922. HIGH POWER DENSITY INDUSTRY PROGRAM.

(a) IN GENERAL.—The Secretary shall establish a comprehensive research, development, demonstration, and commercial application to improve the energy efficiency of high power density facilities, including data centers, server farms, and telecommunications facilities.

ACTIONS TAKEN

Over the past 11 years NITC has identified and implemented many energy savings initiatives the most significant are as follows:

- Replacement of Data Center lighting with high efficiency electronic ballasts utilizing low wattage lamps.
- Installation of a Virtual Tape System allowing for the decommissioning & removal of many outdated and inefficient tape drives.
- Replacement of outdated and inefficient Computer Room Air Conditioning (CRAC) Units with newer technology rated at >90% efficient.
- Replacement of Uninterruptible Power Supply (UPS) units, with high
 efficiency modular units that allow for the right sizing of supply power to
 load while operating at >93% efficiency.
- Replacement of main electrical distribution system transformers with newer technology that operates at >95% efficiency.
- Replacement of rooftop mounted air conditioning dry-coolers with new units rated to operate at >90% efficiency.
- Replacement of air conditioning system in the main power distribution center with units rated to operate at >90% efficiency and capable of "freecooling" when outside air temperatures drop below 40F.
- Virtualization across many shared computing environments allowing the physical number of machines to be reduced.
- Removal of under floor blockages to increase air flow to computing equipment.
- A concerted effort to optimize the raised floor layout by relocating equipment and aligning the entire space to the hot row-cold row concept of operations.
- Analyzed space to ensure that conditioned air was directed to heat loads.
 Realigned layout and location of vented floor tiles and installed blanking panels in racks and air dams in floor penetrations to channel conditioned air as needed.
- Continuous monitoring and adjustments to CRAC units to ensure that they
 are properly coordinated, and that inefficient operations such as, one unit
 being in a heat mode competing with others in a maximum cooling mode,
 do not occur.

FUTURE STATE

NITC has evaluated technologies where additional energy efficiencies can be gained and intends to implement the following over the next 2 to 3 years:

- In-row cooling. With close coupled cooling technology the cooling source can be moved directly adjacent to the heat source. This proximity allows the use of less powerful fans.
- As EnergyStar and/or other energy efficient certifications become available and cost effective, all new and replacement servers shall have an energy efficient certification.
- NITC will consolidate to a single shared storage solution for mainframe DASD and its mid-range Enterprise Storage Area Network. Elimination of an entire storage platform will dramatically reduce energy consumption directly attributable to enterprise storage
- As customer computing uptime requirements allow, NITC will continue to
 optimize its floor layout until the entire data center is physically aligned
 into a hot row-cold row concept of operations.
- NITC will continue to maximize virtualization of its shared computing environments and when applicable, recommend this solution to customers on dedicated platforms.

Outstanding Teamwork Produces Small Icon with Huge Impact

By Steve Spector, ITS



The Support Information button appeared last August. It is in the System Tray (the part of the taskbar where the clock is) of every I&O/ITS desktop, laptop, and tablet computerover 45,000 of them. The hardware is used by Service Center Agency employees (Farm Service Agency, Natural Resources Conservation Service, Rural Development, and their partners), OCIO staff, and other I&O customers. The icon is little, but its positive impact is vast - with a single click any I&O customer, anywhere across the United States and its territories, can find his or her Technical Support team when help is needed.

How do I get help?

This solution to the question appears simple but it is actually a very sophisticated program designed by Frank Menkin, TSD-New England/Maine and delivered through a team effort across TSD and the Infrastructure Operations Division (IOD)-Infrastructure Deployment Branch (IDB).

Early in 2007, after a good deal of brainstorming, Larry Brooks, TSD Director, and his managers had a plan to improve contact methods for customers. Allison Campbell, TSD Chief-Large Offices, and Kathi Smith, TSD Chief-Central Region, spearheaded an effort to produce contact materials – brochures and cards – that each TSD team could customize for its customers. Vinod Gu-

lati, TSD Chief-Eastern Region, joined with Larry and Allison to develop a computer-based tool. Vinod approached the IDB, also known as the Interoperability Lab (the IO Lab manages all changes and upgrades to the ITS computing system in order to



Photo: Frank Menkin with the TSD icon, (photo by Stacey Hughes, TSD-New England/Maine).

safeguard and optimize the Common Computing Environment).

Barry Hodge, Integration & Security Manager, and Carl Chernisky, Lead Integrator, suggested a system tray tool residing in the taskbar of a computer's desktop, always there, and ready to be clicked. Barry also suggested Frank Menkin for the design & programming.

Frank joined USDA about 5 years ago after careers in show business, marketing/programming/system design with IBM in New York City, and independent IT consulting and programming.

His supervisor, Mike L'Esperance, TSD-New England Group Manager, and Maine Team Leader, Dick Hunter, felt Frank could help out the IO Lab now and then with his problem-solving and programming skills. They'd noticed these when Frank figured out the cause of a rash of end-user hard drive crashes and developed procedures for disk recovery, HDD optimization, and early detection before failure. They introduced Frank to the IO Lab.

Frank Menkin said, "Barry Hodge contacted me with the requirements: to design and develop a TSD icon in the

system tray that would show contact info for the state where a PC resides. We used ITS' Distributed File System (DFS) to individually manage the contact information for each of sixty-nine TSD state and large office groups. The system can retain a customized contact page so that, even if communications are down, the user can still view the most recent screen and contact the TSD team by phone. Vinod Gulati was in touch with additional requirements and changes as he presented interim versions to Larry Brooks and the Branch Chiefs."

Elegant program and simple to use

A click on the **TSD** icon takes a user to the Support Team contact telephone numbers and locations, so everyone has an option to e-mail or call someone directly, to input a request for support, or to fill out a Magic Ticket.

Each TSD Group Manager can also access the other side of the tool, updating it as needed with new contact information and messages.



Screenshot: The TSD Information Editor allows Group Managers to easily update, check, and post their team contact information.

A TEAM Effort

Frank Menkin worked closely with Frank Hoeppel who, as the Release Manager on the System Tray, shepherded the project through all phases of deployment, integration, testing, and the SMS release to 45,925 computers in about 100 hours.



Photo: Members of the TSD System Tray team included, left to right, Anil Shukla, Frank Hoeppel, Carl Diliberto, and Jay Szlamowicz (photo by Jesse Fleury, IOD-IDB).

TSD System Tray Team

Design: Barry Hodge, Frank Menkin Integration: Carl Diliberto, Anil Shukla

Security: Mark Gapen Testing: Jay Szlamowicz

Field Testing: All TSD Group Managers Deployment: Frank Hoeppel, David

Pfaffenberger

Delivered! August/September Deployment Highlights from the 10 Lab.

Below are a few of the major I&O/ITS/SCA projects from 84 projects deployed in August/September 2007 by the I&O Interoperability Lab/Infrastructure Deployment Branch/Infrastructure Operations Division of ITS (these include numerous security patches and software upgrades).

Project Name	Agency/Initiator & ITS Release Manager	Deployment Description
Engineering Field Tools (EFT) 1.1 – EFT 1.1 provides NRCS with a new framework for Engineering applications. The Engineering Field Tools 1.1 release also included Survey Engineering Tool (SET). This new framework will allow the end-user to download upgrades and applications, that are delivered within the EFT Framework.	NRCS - Ken Rojas Release Manager - David Pfaffenberger	The EFT 1.1 Framework was deployed by the IDB-SMSDS team to NRCS workstations through SMS. This automated deployment automatically installed EFT on select NRCS workstations throughout the enterprise. The target workstations are managed by the ITS-TSD staff. TSD is able to add workstations to a list in Active Directory at any time. Once the workstation is added, SMS will automatically install the application within 48 hours. EFT 1.1 was deployed and installed on over 7,100 NRCS workstations since It's release on Aug. 24th
JRE 1.5.0 (Java Runtime Environment) - JRE Is considered one of the core applications on the ITS Workstation Image. With more than a dozen upgrades to this application annually, this application Is constantly updated to keep up with private sector standards.	Enterprise-wide - Chuck Fluery Release Manager- David Pfaffenberger	JRE 1.5.0_11 was deployed to all ITS workstations throughout the enterprise. With the constant updates to the JRE application, it's critical to have a deployment tool like SMS. In a matter of hours, JRE was installed on over 46,000 workstations, and efforts are already underway for the next version!
Citrix Client 9.150 – Due to security vulnerabilities found with previous Citrix Clients, an upgrade was required. Citrix is used by RD as a "Thin Client" for accessing the Unifi Application. This allows all processing to be performed on centralized servers, while providing a minimal impact on processing at the local workstation level.	RD - Susan Bruner Release Manager - David Pfaffenberger	Citrix 9.150 was deployed through SMS to over 3,700 RD workstations nationwide. This installation also automatically uninstalled 2 previous versions of Citrix from the workstation.
TSD Support Information System Tray - This is a clickable icon in the taskbar of every ITS computer. When clicked, it provides Technical Support Team contact information for the enduser. A feature story about this tool is on page 5.	Enterprise-wide - OCIO/ITS - Vinod Gulati Release Manager - Frank Hoeppel	Using SMS, the TSD Support Info System Tray application was deployed to all ITS supported workstations. With over 45,000 installations to date, SMS provides an efficient method of installing applications with little or no systems management on the local workstation.
ArcGIS 9.2 SP2 – This is the current upgrade for NRCS client work stations.	NRCS - Jim Carrington Release Manager - Frank Hoeppel	Using SMS to deploy installs and upgrades to servers has proven to be very efficient and cost effective. Through SMS reports, we are able to identify exactly which workstations require the upgrade and target our deployments to only those sites. This deployment targeted over 450 servers throughout the country that required the upgrade.
ArcGIS 9.1 SP2 – This version of ArcGIS is for FSA's client workstations and matches the ArcSDE version for its servers. This has streamlined ongoing database updates and the activities that rely on new FSA ArcGIS data.	FSA & NRCS Initiator: Ted Payne Release Manager: David Hyde	Released on 11/7, this package was deployed through SMS which automatically updated over 2,200 workstations using ArcGIS 9.1 with a Service Pack 2 upgrade. With SMS, the ability to identify the workstations with ArcGIS 9.1 installed is built into the SMS release.
PC Farm and Home Plan (PCFHP) 5.0 Removal Tool— PC FHP was an application used by FSA that has now been replaced by a web application. The prior version had to be removed from all computers that used it.	FSA Initiator: Phil Owen Release Manager: David Pfaffenberger	The requirement to uninstall over 500 individual installations of this application posed a huge workload for TSD Staff. However, this package was deployed through SMS and automatically uninstalled over 500 client installs of the PC FHP 5.0, overnight
EPIC V 2.09 – Used by Human Resource divisions, in conjunction with employee records processing in NFC, this latest version was released by NFC with a very short timeframe for implementation.	IDB Initiator: David Pfaffenberger Release Manager: David Pfaffenberger	This application was obtained from NFC, tested, certified and posted to the ITS Team Services Website in less than 1 week from start to release. TSD staff installed it from September 13 until November 5 to install.
ArcGIS 9.2 for Other Platforms — This release of the ESRI desktop application suite is an improvement over the previous release, namely: Automation of the uninstall process for previous versions of ArcGIS Desktop. Enables tablet and laptop support. Built-in changes discovered during and after the initial deployment of ArcGIS Desktop 9.2. Incorporation of Service Pack 2 into the build to set a baseline for future installs. Includes a revised license manager to allow for workstations to utilize a centralized license manager.	NRCS Initiator: Stephen Webber Release Manager: Frank Hoeppel	Jason Hayes integrated a number of modifications and improvements into this release of 9.2 Desktop, from vendor releases (Service Pack 2), TSD requests (using CD's instead of DVD as the format) and customer feedback (tablet support, Python settings changes, license manager upgrades). A new delivery method was used to speed distribution by installing .ISO images of the CD's on the Distributed File Share. As of this writing more than 800 installations of the 9 CD/3.7 GB package have occurred.













