



News you can use...

Microsoft Exchange Update...

Project Progress...

A Team effort...

The ARS Email Consolidation Project is closer than ever to becoming a reality for all ARS employees.

Members of the OCIO Infrastructure, Customer Support, Web, and Cybersecurity Branches have been working closely with a team of engineers from Microsoft Consulting to design and build our new Exchange system that will provide email services to all ARS employees, nationwide.

Over the last eight weeks, starting in August, the OCIO—Microsoft team has been actively involved in research and decision making pertaining to the myriad details that make

up the requirements of the new system. These requirements are primarily how the system will be migrated from GroupWise, which features will be installed, how the system will be administrated and operated, and which features users can expect.

OCIO Engineering Team

Top to bottom, left to right,



Victor Unruh, Louisa Castillo, Melissa Goodloe, Tom Houston, Anthony Johnson, Lisa Leupen, Terri Johnson, Angela Pompey, Rob Butler and other OCIO Engineers and Technicians not pictured from the Infrastructure and Customer Support Branches.

The team has also been working on the system design, which is much like a blueprint for a building. This design, which is based on the system requirements, is a blueprint for what the Exchange system will look like when it is built. The team is now using this blueprint to build a pilot “configuration” of the Exchange system that will be used to ensure that everything works as intended and the many parts work together. (continued page 4)

USDA OCIO Approves Internet2 for ARS...

The Skinny...

Internet 2 is a joint university-business effort aimed at delivering the next generation of high speed services. About 150 universities in partnership with companies like Cisco Systems, Quest, Nortel, and IBM are supporting Internet2 and its network, called Abilene (named after the railhead in Abilene, Kansas, that opened the

West) The companies and universities are spending over \$300 million a year on the project to further expand and fine tune the network.

Abilene operates at “warp speed”—some 2.4 gigabits a second, or for you folks still using dial-up, it is 45,000 times faster than your 56k modem. For example, 10 sets of encyclopedias can move over the

fiber optic lines in one second flat. The Abilene network, headquartered in Indianapolis, came into existence in 1999 and is growing rapidly. Now university and government researchers have an electronic environment where they can use supercomputers to manipulate vast amounts of data, such as genome sequencing or bioinformatics data. (continued page 5)

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Special points of interest:

PDF conversion tool evaluation *page 3*

Technical overview of ARS Internet2 *page 5*

New ARS OCIO employees *page 6*

Consolidated Web Site launch *page 4*

Inside this issue:

Spyware / Adware **2**

MessageScreen **2**

eAuthentication **3**

PDF to word conversion **3**

ARS Intranet **4**

Important phone numbers **7**

Ask Dr. Word **7**

Spyware—Adware...

Spyware is any technology that aids in gathering information about a person or organization without its knowledge.

On the Internet (where it is sometimes called a *spybot* or *tracking software*), spyware is programming that is put in someone's computer to secretly gather information about the user and relay it to advertisers or other interested parties.

Spyware can get in a computer as a software virus or as the result of installing a new program.

Data collecting programs that are installed with the user's knowledge are not, properly speaking, spyware, if the user fully understands which data are being collected and with whom it is being shared. However, spyware is often installed without the user's consent, as a drive-by download, or as the result of clicking some option in a deceptive pop-up window.

A cookie is a well-known mechanism for storing information about an Internet user on the user's own computer. However, the existence of cookies and their use is generally not concealed from users, who can also disallow access to cookie information.

Nevertheless, to the extent that

a Web site stores information about you in a cookie that you don't know about, the cookie mechanism could be considered a form of spyware.

Adware, which is software designed to serve advertising, can usually be thought of as spyware because it almost invariably includes components for tracking and reporting user information.

Generically, adware is any software application in which advertising banners are displayed while the program is running. The authors of these applications include additional code that delivers the ads, which can be viewed through pop-up windows or through a bar that appears on a computer screen.

The justification for adware is that it helps recover programming development cost and helps to hold down the cost for the user.

Adware has been criticized because it usually includes code that tracks a user's personal information and passes it on to third parties without the user's authorization or knowledge.

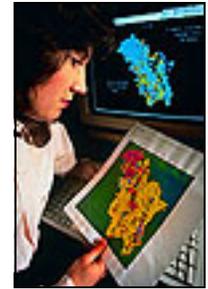
This practice has been dubbed spyware and has prompted an outcry from computer security and privacy advocates, includ-

ing the Electronic Privacy Information Center.

Noted privacy software experts in the field have explained that: "Spyware is any software (that employs a user's Internet connection in the background (the so-called 'backchannel') without their knowledge or explicit permission.

Silent background use of an Internet 'backchannel' connection must be preceded by a complete and truthful disclosure of proposed backchannel usage, followed by the receipt of explicit, informed consent for such use. Any software communicating across the Internet absent of these elements is guilty of information theft and is properly and rightfully termed: Spyware."

A number of software applications, including Ad-Aware and OptOut, are available as free-ware to help computer users search for and remove suspected spyware programs.



MessageScreen Appliance...

A Spam, Virus, and Explicit Content Filtering Appliance integrated into ARS Exchange email system.

MessageScreen is a high-performance spam, virus, and image filtering appliance that consistently blocks over 98% of spam and explicit content using multi-layered scanning techniques such as Real-Time Block Lists (RBLs), Sender Server Verification, lexical intelligence, predictive analysis, advanced

heuristic scoring, anti-virus, and image scanning.

The MessageScreen appliance is pre-configured with over 8,000 default spam-stopping rules that can be easily customized specifically for any organization. The appliance can reside behind or outside an organization's main firewall and integrates a World Class Anti-Virus protection with the Integration of the Sophos Virus Engine.

The Sophos Anti-Virus has a heuristic capability built into its standard signature detection methods that allows it to detect some virus variants that have not yet been analyzed by the Sophos labs.

However, because Sophos tempers its heuristic capability with other virus-detection technology, it has an extremely low false positive quotient. (continued on page 4)



eAuthentication...

Jim Neal is the OCIO point of contact with the Department's eGov initiatives.



As the eGovernment Program Manager, Jim is tasked with providing focus to the Department eGovernment effort as it applies to ARS. Several meetings are held each month to discuss all the eGovernment initiatives currently active within

the Department and ARS. These meetings cover progress, action items, problems, resolutions, and discussions about current impacts to the program.

In addition to Jim being the eGovernment Program Manager, he is also the ARS eAuthentication credentialing point of contact. This role requires Jim to interface with the Department on credentialing issues and assist ARS employees in obtaining an authenticated ID and password.

The authentication credentials (ID and password) allow ARS employees to access AgLearn to take mandatory training and

further their personal and professional training goals. Additionally, employees will have to use their credentials to access other government accounts, such as the TSP web site.

The eAuthentication initiative will eventually allow ARS employees to access other Department Web based applications and informational sites while only authenticating once for access to all services.

ARS started this initiative in July, 2004 and has authenticated almost 6000 employees to date. Jim can be reached at jneal@ars.usda.gov or 301-504-5667.



Converting .PDF Documents to Word...

Product Review...

All of the Oracle reports produced on the ARIS platform are presented in a .PDF format.

The question is frequently asked "Is there a way to convert to Word?"

The OCIO—Application Development Branch staff has reviewed PDF to Microsoft Word conversion software to give you the capability of saving PDF files produced in ARIS, then converting to a Word document.

The two products evaluated were Scansoft PDF Converter and Escape Velocity SolidConverter PDF. Trial versions were available at www.cnet.com.

They tested PDF files that were generated by Oracle Reports as well as some other general PDF documents.

Scansoft PDF Converter is a plug-in for Microsoft Word. Once installed you open Microsoft Word and select File then Open and select any PDF file. The software converts the PDF to Word. This software's limita-

tion is that it can only be run as a plug-in through Microsoft Word.

Scansoft did not convert most PDF files satisfactorily. Some of the text in a column did not line up correctly with other columns in same line, the page layouts expanded into more than one page from the original, and some of solid line did not convert.

In some of the label format reports less than half of text height is displayed, essentially chopping off the top half of the word. However, there were some reports with a listing format that converted with no flaws.

It was difficult to fix incorrect conversions by Scansoft This software does not have an option for the user to select how the document should be converted.

SolidConverter PDF, on the other hand, performed much better than Scansoft but still did not perform 100% literal conversion. It produced fewer flaws than Scansoft and most

flaws were less difficult to fix. This software is also a plug-in to Microsoft Word but unlike Scansoft, it can be used as a stand-alone application.

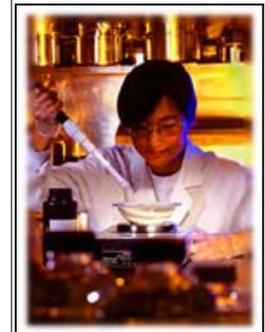
SolidConverter allows the user to choose options of how the document should be converted and there are more features in SolidConverter.

SolidConverter also has a problem with cutting off the top of the text, but this only seemed to occur when the same line had multiple font size and types.

Another common flaw in SolidConverter was some text wasn't aligned in same row with other text. This flaw can be easily fixed by manually adding a carriage return or resizing the column box.

Conclusion – neither software converts PDF to Word 100% literally. If some minor flaws are acceptable, then SolidConverter PDF would be the best choice.

Both products are about \$50 for a single license.



Yogi Berra

"Ninety percent of all mental errors are in your head."

ARS Intranet...

The ARS Intranet Pilot is in full swing with a sampling of 250 users grouped into specific Pilot teams that cut across disciplines throughout the Agency.

The virtual workspaces (or Team sites) used by these teams provide web-based bulletin boards, version-controlled document libraries, and much more - all within one cohesive web site for each team.

Feedback from these teams has been very encouraging and productive as we work to deliver a complete web-based communication environment.

The Pilot is based on Micro-

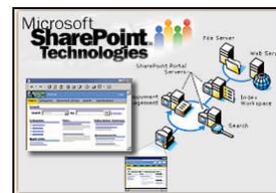
soft's Sharepoint product line and is serving as a learning tool as we prepare to launch the production system across the Agency, complete with server redundancy and Exchange email account integration.

The technical lead for this effort is Raj Pujara (rpujara@ars.usda.gov) and the project is managed by Pete Lombardo (pvl@ars.usda.gov), both of the ARS OCIO Web Branch.

The production intranet system is coming to a desktop near you starting this winter!

Left to right: Pete Lombardo,

Branch Chief, Web Branch and Raj Pujara.



Microsoft Exchange ... (continued from page 1)

The next step, which will occur in the October timeframe, is building the actual system exactly as the design and plan state. After this occurs, a Pilot Test will begin where a number of people will begin using the new production Exchange-Outlook system for their everyday email so that any design flaws or oversights can be



Microsoft Engineers from left to right, David Dixon, Deb Char, Justin Brown, Paul Yu, and Greg Turner

identified and resolved before everyone begins using the system.

The OCIO plans to "pilot" the

Exchange system and Outlook client at the GWCC in November with roll-outs to BARC, NAA, and SAA to follow soon after. If all goes as planned, the OCIO will build out the infrastructure at Ft. Collins in early 2005 while we are rolling out Outlook on the East coast.

If the email deployment goes according to plan, the OCIO sees the folks in the central and western U.S. using Outlook by late 2005 if not sooner.

MessageScreen... (continued from page 2)

Many organizations do not implement anti-spam solutions because of the fear of the number of help desk calls that will come from users having a wanted message blocked by the anti-spam filter.

The Enhanced User Control feature of MessageScreen allows you to put those concerns aside and let end users determine what is considered/not considered spam for themselves.

Enhanced User Controls (EUC) are a unique feature of

MessageScreen that allows all end users within the organization to have access to managing all or some of the following functionality:

- Manage Inbound Quarantine
- Manage Outbound Quarantine
- Release Quarantined Messages
- Delete Quarantined Messages
- Enable/Disable Filtering
- Set UCE/spam base rule level
- Set Explicit Content base rule level

Consolidated Website Launch

On October 15, 2004 the ARS Web site will be updated to include the USDA directed Web Site Design and will introduce integrated-yet-unique web sites for each unit in the Agency that are based on the Web Site Consolidation Phase 1 work that these units have been working on this summer.

Check it out!!!

<http://ars.usda.gov>



Yogi Berra

"It was impossible to get a conversation going; everybody was talking too much."

Internet2...
(continued from page 1)

The OCIO, working with BARC computer specialists, drafted a waiver request that was sent to the USDA CIO for waiver approval. After several meetings, phone calls, and technical design reviews, ARS was granted a waiver request to plug into Internet2.

Technical Overview for Techies

ARS will be utilizing Virtual Private Networking as an extension of a private network to transverse the fiber optic connectivity across BARC's network. VPN technologies will allow ARS to send data between a standalone computer and Internet2 access in a manner that emulates the properties of a point-to-point configuration (air-gap design). To emulate a direct "air-gap" configuration, data are encapsulated, or wrapped, with a header that provides routing information allowing it to transverse the BARC infrastructure from the

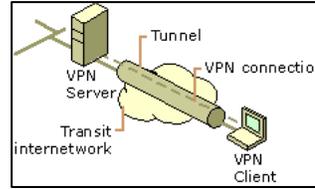
Internet 2 head-end to the client's computer endpoint.

To emulate the Department's preferred "air-gap" method, the data being sent are encrypted for confidentiality. Packets that are intercepted on the BARC infrastructure are indecipherable without the encryption keys.

ARS engineers will configure the end user VPN software to enforce a rule that no "split tunneling" is to be allowed ensuring that the end user cannot access the BARC / Department infrastructure while utilizing the VPN tunnel to access Internet2.

Utilizing VPN tunnels provides a high level of confidentiality, integrity, and availability without the associated expense of the "air-gap" design. Since this technology is encrypted from the Internet2 head-end to the end users; termination point, security for this application would be deemed a "low-risk." ARS will provide the connectivity equipment to be installed at the GWCC facility. It has been

agreed that the Department will manage the ARS-supplied PIX firewall as well as terminating the Internet2 connectivity into



the Department's gear. ARS engineers will manage the VPN connectivity.

Internet2 Pending in Nebraska

OCIO engineers have submitted a waiver request for Internet2 connectivity between the ARS Meat Animal Research Center (MARC), Clay Center, Nebraska, and the University of Nebraska.

Based on meetings with the Department's Cyber Security staff, OCIO and MARC Computer specialists have met or exceeded all Department security requirements. The OCIO expects a waiver approval for the MARC in the October time-frame.



New OCIO Employees...

Biography...

Tamra Goldstein joins the OCIO as our new Deputy Chief Information Officer. Tamra holds a Master of Science degree in Computer Sciences from The Johns Hopkins University and a Bachelor of Science from Mary Washington College. Tamra has over 15 years experience in information technology for the Federal government, working for the Defense Information Systems Agency, U.S. Patent and Trademark Office, and the General Accounting office before joining ARS.



Tamra can be reached at tgoldstein@ars.usda.gov or 301-504-5600.

Biography...

Jill Philpot is the Agency's Webmaster. Jill joins us from Beltsville's ANRI Bovine and Functional Genomics Laboratory where she served as a Bioinformatics Support Scientist designing genomic databases and supporting several web sites.

Jill has done extensive database and web development, including DNA Database design, Perl, MySQL, SQL, DB2, C, and other technologies. She holds a Master of Science degree in Animal Science from McGill University in Canada.

Jill has recently served with the

Web Branch as a detailee for three months and therefore was well aware of "what she was getting into," so we are particularly glad that she chose to join us anyway.



Jill can be reached at 301-504-5683 or jphillpot@ars.usda.gov.

Biography...

Joy McDaniel joined the ARS Cyber security Team June 27, 2004. Joy has served with ARS at the Beltsville Agricultural Research Center (BARC) for 15 years as the Area IT Specialist.

Yogi Berra

"When you're part of a team, you stand up for your teammates. Your loyalty is to them. You protect them through good and bad, because they'd do the same for you."

New OCIO Employees...

(Continued from page 5)

Joy will be coordinating the development of Agency-specific IT security policies and procedures, assisting with the Certification and Accreditation activities, and will be involved with Agency security planning initiatives.



Joy can be reached at 301-504-1212 or at jmcdaniel@ars.usda.gov.

Biography...

Please welcome Chulee "Pin" Harris to the Office of the Chief Information Officer, Cybersecurity Branch. Pin joined ARS Cybersecurity Team August 8, 2004. Pin previously worked in the ARS Recruitment Office as a Program Assistant. Pin will provide administrative support to the Cybersecurity Staff, assist with the Certification and Accreditation activities, maintain cybersecurity tracking databases, and assist with a variety of Cybersecurity projects by gathering and organizing data.



Pin can be reached at 301-504-4841 or charris@ars.usda.gov.

Biography...

Please welcome Rebecca Fitzgerald to the OCIO Customer Support Branch as our new records manager, assisting Steve Pollard. Rebecca comes to us from Mt. St. Mary's College where she was the resident archivist.

Rebecca received her MLS (Master of Library Science) degree from the University of Maryland and has significant experience developing records schedules and training users on proper records storage.

Rebecca will be key in assessing and leading ARS into the world of electronic records management.



Rebecca can be reached at 301-504-1212 or rftzgerald@ars.usda.gov

Biography...

Ivan Scott is a new addition to the Infrastructure Branch. Ivan is a high school senior with a 3.5 grade point average. He attends Suitland High School in Prince George's County, Maryland and is a volunteer intern with OCIO\IB. Ivan is currently enrolled in the Cisco Networking Academy and is shadowing and provided assistance to the OCIO Wide Area Network Team at the George Washington Carver Center.



Biography...

Iris Mars has joined the Application Development Branch as an IT Specialist, specifically an Oracle Forms and Reports developer. Iris has been doing Web site development for the past few years, but is not new to the Federal Government. Iris

spent 10 years at the Department of Veterans Affairs as an application developer in Oracle. Iris can be reached at imars@ars.usda.gov



Biography...

Michelle Carlson is on detail as part of the USDA's Executive Potential Program. As such, she will report to the Deputy CIO and will be drafting an OCIO Strategic Plan, using the ARS Strategic Plan, the Draft Knipling Report, and our OCIO Vision Paper as guidance, as well as interviewing members of the Senior Management Team.



Yogi Berra

"If you don't know where you're going, you might not get there."





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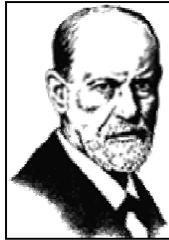
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Dr. Word



Dear Dr. Word ...

This issue I am writing answers to the most requested questions...

AutoCorrect Can be Useful

Ever grumbled about typing those long scientific names? Word's AutoCorrect feature can be very useful. How does AutoCorrect work? You type one thing - - hte - - and Word automatically corrects it with - the - - when you hit the space bar. To add your own entries to AutoCorrect:

Go to Tools | AutoCorrect Enter the text you want Replaced by the With field

Click Add, OK

If there are typos, misspellings for which Word can find suggestions, you can add typos and their corrections to AutoCorrect by right-clicking the red-underlined typo and choosing AutoCorrect from the menu. Now select the correct spelling, and that particular typo won't bother you again. If Word has no spelling suggestions, the AutoCorrect option won't appear in the menu.

Backup Copy of Current Document

You have the option in Word to create a backup copy (the previously saved version) of the current document each time you save the document. Choose Tools | Options | and click on the Save tab. Now select the Always Create Backup Copy check box and click OK.

(Remember, you can find out a bit more information about the options presented in ANY Office dialog box by right-clicking on the option and choosing What's This? You may want to explore some of the other options presented on the Save tab.)

To retrieve a backed-up file, choose File | Open. When the dialog box opens, click on the arrow at the right side of the Files Of Type list box to expand the list. Select All Files (*.*) and look for files with your document's name but with a .wbk extension. Load the .wbk file.

Blank Lines in a Bulleted - Numbered List

Ever want to insert a blank line in the midst of a bulleted or numbered list in Word (without getting a bullet or number)? Just press Shift-Enter to move to the next line without inserting a bullet or number. If you then press Enter bullets or numbering will be resumed as you move to the next line.

Disabling Drag and Drop Text

You probably already know that you can move text in Word by selecting it, grabbing and holding it with your mouse, and dragging it to another location. While some folks like this feature, other people only wind up using drag-and-drop text by accident when they're trying to select text. If you find that drag-and-drop text usually just gets in the way, you can disable the feature. Just choose Tools | Options and click the Edit tab. Then, deselect the Drag And Drop Editing option and click OK.

Editing Where You Left Off

Want to begin editing at the point where you were in the document when you last saved it? One simple way to get to where you left off is to open the document and press Shift-F5. This takes you to where you were when you last saved the document before closing it.

I hope these tips have been helpful.

Sincerely, Dr. Word

Please send all suggestions or newsletter comments to:
ocionews@ars.usda.gov