EPA

Conference on Paperless Auditing

Issues, Standards, Successes, Approaches, Problems

Building upon the Federal Audit Executive Council Committee Report
"A Guide for Selecting Audit Workpaper Software"

April 2, 1998

Summary Conference Proceedings,

Survey Results, Conclusions and
Follow-up Actions

A Report Special by the Office of Inspector General

United States Environmental Protection Agency

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Introduction

Auditing has traditionally been a paper intensive process relying on review of records, development of evidence and analysis, all culminating in written reports. However, many aspects of auditing can and should be converted to electronic processes to improve the quality, quantity, timeliness, analysis, economy, efficiency and potential effectiveness. No longer should auditors spend the time and money traveling just to examine, review and photocopy documents and records that can be transmitted and maintained electronically. Using electronic processes auditors and supervisors working in remote locations can collaborate on the same product as if they are in the same room.

The transition from paper-dependent to electronic auditing should be as natural as changing from thirteen column spread sheets or legal writing pads to electronic spread sheets or word processing. Probably the greatest benefit of electronic auditing is the unlimited opportunity for use of advanced tools of analysis, presentation and distribution. Along with automatic features such as, search, spell check, footing and crossfooting, sophisticated financial and statistical analysis, auditors can now scan, select, stratify and aggregate vast amounts of data and words. Auditors can also now present information in attractive reports and briefings featuring graphics, pictures and other images that help audit clients and stakeholders better understand the results and value of the audit work for greater impact.. Also, electronic reports and workpapers provide improved accountability through electronic accessability, storage and distribution. Reports and workpapers be electronically linked to original documentary evidence and be posted on the Internet with electronic links to other documents and references.

The full value of electronic auditing has not yet been realized. But it will change the industry itself, increasing value to its auditees and their customers, stakeholders and clients. It will significantly eliminate the "auditing expectation gap", improve organizational integrity, and help build constructive partnerships between auditees and auditors, and build greater trust in government.

However, there are a number of technical , resource, security, accessability, and legal issues to resolve as well as behavioral barriers associated with changing from traditional processes and practices. This conference was created to help, stimulate the advancement of electronic auditing and facilitate ideas and solutions for overcoming the barriers.

Acknowledgments

We would like to thank Robin Butler, House Committee on Government Reform and Oversight staff, for arranging use of the Main Caucus Room, Cannon HOB; all of the speakers listed on the following page; Roy Connor, Library of Congress OIG, members of the EPA OIG who assisted in the planning, logistics and note taking, Kenneth Konz, AIGA of EPA, all the attendees who contributed with questions, discussion and returned their survey sheets; and especially Robert Lieberman for his excellent job as moderator.

Purpose

This conference was designed to provide a forum for sharing information on the application of electronic auditing throughout the Federal Government. Specifically, practitioners shared their knowledge on the overall value, costs, problems, technology, requirements, constraints and solutions resulting from their use of electronic auditing. Some members of the auditing community have made significant progress in moving toward paperless auditing, while others are just getting started. This conference provided the opportunity to present the issues and challenges of paperless auditing, and a discussion about how several offices are meeting those challenges. Those auditing offices with experience have something of value to share with those who do not have similar experiences, as well as sharing ideas with each other about their successes and still unresolved problems.

It was our goal to help facilitate the audit community in combining its collective knowledge for greater efficiency and effectiveness. Instead of each office researching, piloting, investing and training independently; there is a significant opportunity at this stage for offices to combine forces and resources to attain a consistent approach and economy of scale in the acquisition and application of technology.

It is our intention to help bring the auditing community together, on a continuing basis, for coordination and creative collaboration by helping identify issues, resources and opportunities for the application of electronic auditing. Electronic auditing can be as simple as developing word-processing workpaper and report templates. But for the life cycle of the audit to be paperless, the process involves adherence to workpaper standards, electronic accessability of reports, compliance with EFOIA, electronic archiving and required record management systems, data storage systems, and security systems to ensure authenticity, prevent manipulation of data, and improper access to confidential information.

Background

The Conference was designed to build on a report issued in February 1998 by The Committee on Paperless Auditing of the Federal Audit Executive Council, *"Auditing in a Paperless Environment" A Guide for Selecting Audit Workpaper Software.* This report summarized the survey results from 65 Federal audit organizations to identify the criteria used to assess available software, and the performance of several different types of software.

Criteria used to evaluate software included: audit workpaper preparation; supervisory review; audit evidence; electronic signature, work paper storage, security, general criteria, software requirements/options; hardware requirements; product support; and cost.

The products reviewed included: AFAA Software, AS/2, IGAS, and TeamMate.
The full report is available on www.ignet.gov

Speaker Contact List from Paperless Audit Conference

Agency	Name (Association to Topic/Software)	Phone
DCAA	Joseph Garcia/Tom Trefry (Microsoft Word/Outlook)	(703)-767-2310
VA	Jim Laky (FOIA/Electronic Redaction Templates)	(202) 565-8002
VA	William Miller (In-House Developed Microsoft Templates for Workpapers & Reports)	(816) 426-7100
NIST	Miles Smid (Records Security/Encryption/Electronic Signature)	(301) 975-2938
GAO	Steve Palincsar (Electronic Access)	(202) 512-3947
GAO	Bert Japikse (PC Docs/ GAO custom Word)	(202) 512-6742
HUD	Ben Hsiao/Barry Kahn (Lotus Notes/IGAS)	(202) 708-3444 X149
GPO	Michael Bright (Electronic Access/Storage)	(512)-0108/408-6975
NARA	William Lefurgy (Archiving Requirements)	(301) 713-6630 X225
Air Force Audit	Patricia Pickett/Mary Jacobs (Teammate)	(703) 696-9263
EPA (EFOIA)	Alan Margolis/Jonathan Newton (FOIA)	(202) 260- 5459
HHS	Jenny Banner Wheeler (IGNet - resigned) Non-federal	(202) 619-3081 (304) 258-3005
NASA	Ron Dill (TeamMate)	(757) 864-8126
EPA	Patricia Hill/James Rothwell (Lotus Notes/AAS/IGAS)	(202) 260-1072
EPA	Ariadne Goerke (Records Mgt)	(202) 260-8298
DoD (PCIE&FAEC)	Robert Lieberman (AIG-DOD/ Moderator)	(703) 604-8901
EPA	Michael Binder (Conference Coordinator)	(202) 260-9684

List of Participating Audit Organizations & Acronyms Used in this Report

AAA*	Army Audit Agency
AAFES	Army/Air Force Exchange Service
AFAA	Air Force Audit Agency
Amtrak	Amtrak
AID	Agency for International Developmnt
DCAA	Defense Contract Audit Agency
DOC	Dept. of Commerce
DOD	Dept. of Defense
DEd	Dept. of Education
DOE	Dept. of Energy
DOI	Dept. of Interior
DOL	Dept. of Labor
DOT	Dept. of Transportation
EEOC	Equal Employment Opportunity Com.
EPA	Environmental Protection Agency
FBI	Federal Bureau of Investigations
FDIC	Federal Deposit Insurance Co.
FEC	Federal Election Commission
FEMA	Federal Emergency Mngmnt Agency
FMC	Federal Maritime Commission
FRB	Federal Reserve Board
GAO	General Accounting Office
GPO	Government Printing Office
GSA	General Services Administration
HHS	Dept. Health & Human Services
HUD	Dept. Housing & Urban Development
IGATI	Inspector General Audit Training Inst.
IRS*	Internal Revenue Service
LOC	Library of Congress
LSC	Legal Services Corporation
MMS	Minerals Management Service
NARA	National Archives and Records Adm.
NASA	National Aeronautics & Space Adm.
NAS	National Academy of Sciences
NAVAS	Naval Audit Service
NCUA	National Credit Union Administrat'n
NIST	National Institute for Science & Tech
NEA	National Endowment for the Arts
NEH	National Endowment for Humanities
NLRB	National Labor Relations Board
OPM	Office of Personnel Management
OPPAGA	Florida Legislature Audit
RRB	Rail Road Retirement Board
SBA	Small Business Administration

SSA	Social Security Admin.
STATE	Dept. of State
TRES	Dept. of Treasury
TVA	Tennessee Valley Authority
USDA	US Dept. of Agriculture
USHR	US House of Representatives
USPC	Peace Corps
USPS	United States Postal Service
VA	Dept. of Veteran Affairs

Acronyms Used

EFOIA	Electronic Freedom of Information Act
HTML	Hypertext Markup Language
PDF	Portable Document File

* Several different units of the same office participated

Individual contact names and phone numbers are available via Michael Binder (202) 260-9684

Summary of Conference Proceedings

Overview

The "Conference on Paperless Auditing" was held on April 2, 1998 at the Main Caucus Room, Cannon House Office Building in Washington, DC. The U.S. Environmental Protection Agency Office of Inspector General hosted the conference which was attended by over 200 participants from 54 Federal audit offices and one state office. Kenneth A. Konz, EPA's Assistant Inspector General for Audit opened the event, emphasizing that the conference represented an opportunity to share and learn from one another, and work together to collectively address and resolve common issues. Robert Lieberman, DOD Office of Inspector General, and Chair, Federal Executive Audit Council Committee on Paperless Auditing, was the moderator.

The Conference on Paperless Auditing, was the first of its type, bringing together audit staff members, managers and subject matter experts covering the full range related topics and levels of experience from those using paperless auditing with aplomb, to those who have only considered the possibilities. The Conference was designed to bring togther as much of the Federal auditing community as possible and introduce as many ideas and concepts as possible. Although other coordinating groups exist, such as the PCIE and the Federal Executive Audit Council, they do not include the breadth of membership or participation represented by this conference. However, they do provide appropriate continuing forums to further examine information on many of the topics presented at this conference. This Conference was also designed to facilitate partnerships between those who have resources and experience and those who do not, presenting the opportunity to pool collective resources taking advantage of economy of scale, and establishing working groups to collaboratively explore and resolve common issues. Attendees earned 8 hours of Government/Auditing CPE for the entire Conference.

The information, conclusions and recommendations that follow, are based on the presentations, discussion and survey results. We hope that it will serve as a resource for initiating or furthering progress toward the reality of industry-wide electronic auditing through increased sharing of information and collaboration. There is still much to do!

Survey responses were received from 36 (67%) of the 54 participating offices, *and represent the knowledge and opinions only of the individual participants – not necessarily of the organizations they represent.*

Paperless Audit/Electronic Work papers/Issues and Best Practices/Costs/Issues/Current Plans *from the morning session*

Summary Ideas & Conclusions

- Technology is not the biggest problem, but behavior, attitude and training are*.
- Auditors must absorb more technology into the workplace or they will be passed by.
- There needs to be strong upper management commitment and resources for automation.
- There is a need for standard platforms and PCs.
- Change and improvement must be made incrementally for people to train, learn and adjust.
- There is a disparity among the technical skills of auditors, many lack basic competencies.
- With electronic records, auditors without new technical auditing skills may be obsolete.
- Electronic workpaper process significantly improves the quality, timeliness and usefulness
   of audit products and allows auditors to greatly reduce turnaround time and do more
audits.
- Electronic audits do not have to be totally paperless.
- Electronic audits provide; shareable workpapers, allow quick assessment of risk, encourage
    more advanced analysis, ability to scan large amounts of data for quicker decisions about
   what to audit, ability to link workpapers and evidence directly to audit reports, opportunity
    for significant savings in travel costs.
- Government standards and requirements for records management and archiving, security,
    electronic signatures and public access need to be considered as part of the audit life
cycle.
- Off the shelf products may need only simple customization such as designing templates and
      may offer a very inexpensive partial solution to get started.
- Completely customized software can provide many audit specific functions, but is usually
      complex, expensive and requires strong in-house technical expertise.
- Building in-house software requires a high degree of overhead, good configuration
      management, corps of in-house experts, testing architecture process for scanning, sound
      access control for security, and auditors with knowledge of process to assist development.
- Automated systems may be very expensive for a small organization.
- Most software packages can be optimized and modified to do most paperless audit products.
- Computer literacy is not a problem with most younger staff.
- Management review can and should occur electronically during the audit instead of after.
- Prepare people for change, set new expectations, then mandate electronic processes.
- A mixed paper paperless approach may be best to get started.
- Electronic archiving, storage, security, and distribution of audit workpapers and reports may
     be done most economically and effectively in a central repository instead of by each
office.
- Several smaller (or combination of) offices may procure technology and support together
      more economically through joint purchases or Interagency Agreements.
- Developing electronic auditing competency assessments and requirements helps drive
training and cultural change.
- Several large audit offices own custom designed electronic audit software that they can
     share with other offices, requiring only office specific technical modifications.

Summary of Software Pilots Discussed by the Speakers

TeamMate - Price Waterhouse
- ▸ MS Office
- ▸ NASA and AFAA
  - ▸ Customization needed
  - ▸ Standard templates
- ▸ AAS - Nations Bank
  - ▸ Lotus Notes
    - ▸ Templates

- ▸ IGAS (Inspector General Audit System)
  - ▸ Lotus Notes
    - ▸ Developed in-house at HUD
    - ▸ Encryption capability/integrated e-mail system access
    - ▸ Currently unable to support
  - ▸ EPA worked with HUD to pilot IGAS, but has since found it unworkable
- ▸ No single software – mixed software/hardware solutions
  - ▸ VA (Microsoft Office- templates developed in-house at no external cost)
  - ▸ DCAA (Visual Basic, Office 97 and Internet)
  - ▸ GAO (PCDocs, MS Office Suite 97 and WAN - highly customized)

Hardware and Software Configuration for Automating the Audit Process (Morning Speakers/Panelists)

Organization	Server Configuration		Desktop Configuration		Comments
	Operating System	Application Software	Operating System	Application Software	
Air Force Audit Agency Policy, Oversight and Systems Division	Not Identified	Price Waterhouse TeamMate	Windows 95	Microsoft Office 97	
Defense Contract Audit Agency	Novell	Microsoft Office 97	Windows 95	Microsoft Office 97	Electronic Workpapers being developed in Microsoft Visual Basic
Environmental Protection Agency	OS/2	Lotus Notes R4.5	Windows 95 and Windows 3.1	Lotus Notes R4.5 Client	Currently piloting HUD IGAS Software
National Aeronautics & Space Administration	Windows NT	Microsoft Office 95	Windows 95	Microsoft Office 95	Purchasing Price Waterhouse TeamMate Software

▸ ***The Government Printing Office - Online document distribution/Storage-***
Michael Bright

- ▸ Home pages for 13 Federal Agencies currently served
- ▸ Will maintain in perpetuity, concept of permanent access
- ▸ E-FOIA Reading Room
- ▸ Toll-free user support to find information
- ▸ Automatic cataloguing
- ▸ Variety of media
- ▸ Will build an interface from data to the Web; can be a front-end or link to another address on your site
- ▸ Plan to establish a secure FTP site for work papers

▸ ***National Archives and Records Administration- Archiving Requirements-***
William Lefurgy

- ▸ Oversees management of all media in the Federal government, including electronic records
- ▸ Agencies ensure proper creation and maintenance of records, NARA assist in standards, policies, procedures and custody of permanent records
- ▸ Your agency's Records Officer is your key contact for records management issues
- ▸ The standard elements of a records management program are:
  - ▸ Inventory your materials
  - ▸ Describe and list material on a Disposition Schedule (Form 115)
  - ▸ Submit form to NARA
- ▸ DOD standards and functional requirements that deal with metadata, disposition of records and record-keeping can be applied government-wide

▸ ***National Institute of Standards and Technology - Security Standards -*** *Miles Smid*
- ▸ NIST is responsible for cryptography standards for automated systems
  - ▸ to provide data protection (scrambling data during transmission)

- ▸ to protect integrity of data (via algorithm)
- ▸ to provide a replacement for the hand-written signature (digital signatures and algorithms)
- ▸ Standards provide
  - ▸ interoperability between vendor products
  - ▸ uniform levels of security
- ▸ Standards development is time-consuming because of the consensus process to create widespread support

- ▸ Federal Information Processing Standards (FIPS) Cryptographic Standards
  - ▸ approved
  - ▸ 5 year review
  - ▸ constant analysis
  - ▸ defined validation tests
- ▸ Tool Kit under development
  - ▸ symmetric encryption (DES ASE, others)
  - ▸ HASH Functions SHA-1 SHA-2
  - ▸ Digital Signature (DSA, RSA, elliptic curve)
  - ▸ Key exchange/agreement
- ▸ AES - strong symmetric block cipher
  - ▸ Call to public to submit candidates
- ▸ Cryptographic security is determined by a series of factors
- ▸ Government and industry are working together
  - ▸ NIST tests and validates
  - ▸ Commercial sector develops

- ▸ ***EPA E-FOIA***   *Alan Margolis /Jonathan Newton*
  - ▸ Electronic FOIA Information Act of 1996
  - ▸ FOIA Amendments - bring FOIA into the electronic age
    - ▸ electronic records are subject to FOIA

- ▸ provide records if reasonably available in a requested format
- ▸ indicate electronic redaction to public
- ▸ doubled time limit for response
- ▸ expedited processing
- ▸ electronic reading room
- ▸ index of records that are likely to be requested – online by December 1999
- ▸ Dept of Justice
  - ▸ To agencies – develop your own guidance

Best Practices/Plans/Discussion

- ▸ *General Accounting Office: Electronic Access*   *Steve Palincsar*
  - ▸ GAO publishes and distributes GSA reports
  - ▸ Inventory exceeds 75,000 products
  - ▸ A good search system is a must
  - ▸ Know your business
  - ▸ Start small and add services

- ▸ *HHS Electronic Access - IGNet*   *Jenny Banner Wheeler*
  - ▸ IGNET started at DOJ as a gopher site
  - ▸ Original mission was "One Face" philosophy (consolidate IGs to show one face to the IG community)
  - ▸ Evolved into an information repository for tool sets for the IG community

- ▸ Began setting standards (e.g., require HTML format for summary documents)
- ▸ Avoid PDF
  - ▸ Time-consuming to download, then find out file is not what you want
  - ▸ PDF files are too easy to create
  - ▸ Search Engines do not find PDF files
- ▸ HTML and PDF are the most favored formats, in general
- ▸ HHS audit reports have HTML summaries with a link to the full document
- ▸ IG community is moving slowly but in a forward direction
- ▸ Internet use is still evolving

- ▸ *EPA - Electronic Records Management*   *Ariadne Goerke*
  - ▸ EPA is using existing DOD and NIST standards to form our own records management policies
  - ▸ DOD offers a testing environment to test products against their standards
    - ▸ 2 vendors records management software products have passed
  - ▸ EPA has a steering committee of senior level managers
  - ▸ Hire a records management specialist
  - ▸ Avoid de-centralized electronic record-keeping
  - ▸ Need one records management standard across the agency

- ▸ *VA- Electronic FOIA Redaction*   *Jim Laky*
  - ▸ Electronic redaction for FOIA
    - ▸ Put frequently requested products on your website
    - ▸ Available in WORD, HTML, PDF
    - ▸ Electronic redaction
      - ▸ work with text
      - ▸ scan graphics
    - ▸ 3rd party FOIA - most requested
    - ▸ Keep electronic version as much like printed version as possible
    - ▸ Remove hidden test and reviewer's comments

- ▸ Watch for properties in summary boxes
- ▸ PDF has endnote problems, loses page breaks
- ▸ Determine who is responsible for the electronic copy
- ▸ Advertise that reports are posted
- ▸ Let IT handle posting, FOIA people handle distribution of FOIA requests
- ▸ Get ideas from other Web sites
- ▸ Disclaimers for how you are handling signatures

Summary of Survey Results

Attendee Profile - Who's Using What Operating System and Applications System

Office	SERVER CONFIGURATION								DESKTOP CONFIGURATION							Comments
	Operating System				Applications System				Operating System				Application System			
	Banyan	Novell	Win NT	Other	Notes	Corel	MSOffice	Other	Win3.1	Win 95	Win NT	Other	Corel	MSOffice	Other	
LoC/OIG	X								X							using typical Windows Software
USDA/OIG		X				X				X			X			starting to think about automation
AFAA			X							X				X		
EEOC/OIG		X							X							
DOD/OIG																
HHS/OIG	X									X						
AMTRAK/OIG			X	X						X				X		
SSA/OIG			X				X									

Agency															Notes
DOE/OIG		X	X	X			X		X		X			X		
OPM/OIG		X								X			X	X	X	TeamMate
FEC/OIG			X	X	X					X				X		
NEH																
TRES/OIG			X				X			X				X		
DOC/OIG	X									X			X			
VA/OIG														X		
LSC/OIG																
USAAA			X					X		X				X		MS Exchange, Custom audit tracking
SBA/OIG		X								X				X		
PeaceCorps/OIG				X												MACINTOSH
NARA/OIG																
RRB/OIG																
TVA/OIG			X					X		X				X		
DCAA		X								X				X	X	
DEd/OIG			X				X			X			X	X		
FDIC/OIG	X		X	X				X		X				X	X	
HUD/OIG					X											
NCUA			X	X				X			X			X	X	
USAID/OIG																
FEME/OIG		X								X				X		

Perceptions of the Main Advantages and Disadvantages
of the Three Major Approaches to Automated Workpapers

Lotus Notes Solution	Microsoft Solution	Custom Software Solution
Advantages: - cost - proven technology - agency will migrate to Notes - readily available - effective & efficient workpapers & reports - security enhancements well documented (7layers) - good for small office - integrated, flexible, robust - interface w/ other applications	- unified software - has great linking function - can buy off the shelf - low startup cost - compatibility w/ software - currently using MS except t - lowest cost - crawl before walk approach - ease of adaptability for auditors; familiar w/applctns - widely used -user friendly - least tech support needed - most flexible/compatible - security enhancements well documented	- meets AFAA (and other s specific) requirements - more flexibility with specific office system environment - can program for agency specific requirements

| *Disadvantages:*
- too expensive
- too many files
- audit files are not consolidated into one file;
- does not automatically generate audit reports
- maintenance not available
- requires a lot of training
- too many challenges
- additional hardware required
- need to customize workpapers
- requires much experience
- inability to do page numbers
- long learning curve
- needs significant support
- requires separate server
- not an agency standard
- complexity in programming
- needs better scanning ability | - Corel users need retraining
- no edit history or report generation
- security problems
- does not complete automated w/p package
- isn't totally automated
- requires in-house development effort
- possible problem of WYSIWYG w/off the shelf software
- training/start up time
- cost of additional hardware
- learning curve
- will this be the standard
- relies on user for control of access/review/revision | - not practical for smaller shop
- too expensive
- too rigid
- implementation/cultural barriers
- cost of getting started & maintenance
- costs of upgrades/changes
- possible compatibility problems
- need in-house programmers
- additional hardware required
- most expense; needs special; tech support & training
- could have limited options
- security @ domain admin level
- too time consuming
- intensive to support
- vendor dependent |

Perception of the Most Critical Factors of Selection for Software & Most Likely Choice to Meet Needs

Most Critical Factors (by respondent)	Most Likely or Best Choice Software
cost, training, support, flexibility, security	Modify current MS/ Windows for automation
cost, consensus building	not sure
tech support	TeamMate

cost	customize current software
cost, h/w- s/w environ., training, types of audits	TeamMate
cost h/w-s/w environ.	Microsoft for smaller agency
technical support	match up to agency standard
cost, tech support, PC/LAN technology	Lotus Notes/Domino
technical support	VA approach (modify MS office)
all factors	Microsoft based
cost, h/w-s/w environment	Microsoft based
cost, h/w-s/w	Microsoft based - TeamMate
all factors	may try VA approach
cost, training	Microsoft based
cost, d/w-s-w environment	Microsoft based
cost, leadership, tech support	incrementally link supporting Workpapers thru HTML
management commitment	Microsoft based
cost	Microsoft - home grown
cost	Microsoft , homegrown then Teammate
cost	none
costs, technical support	Lotus Notes
h/w-s/w environment, training	Microsoft
cost, staff resistance	custom or Lotus Notes
agency standard	currently implementing Notes for audits/investigations
cost, speed, delivery of products	Lotus Notes

cost	Lotus Notes
cost, tech support, types of audits	Microsoft or VA home grown
cost	homegrown from Win NT
training and culture	incremental additions to Novell
cost	Microsoft based
cost, tech support	none are cost effective

Perceived Priority of the Technical Issues to be Resolved to Implement the Life-Cycle of Electronic Auditing

Ranking 1=lowest to 8 =highest

Distribution of Rankings

Technical Issue	1s	2s	3s	4s	5s	6s	7s	8s	Wgt'd AVG.	Rank
Scanning Paper Documents	3	8	2	4	6	7	5	2	4.2	**5**
Security (access controls)	4	2	0	1	2	6	2	19	6.2	**1**
Encryption of Data	1	2	7	2	6	6	2	9	5.1	**2**
Electronic Signature	1	3	5	6	5	4	7	4	4.8	**4**
Archival and Storage of Data	1	3	4	7	8	4	6	4	5.0	**3**
Electronic FOIA	4	5	5	7	5	3	1	3	3.7	**6**
Electronic Publishing	3	8	6	6	2	6	2	2	3.7	**7**

Other: Consolidate multi-sites								1		
Other: Technical support								2		
Other: Review Standards								1		
Other: Document Interface								1		
Other: Training								1		

Conclusion from responses

Security and encryption of data appear to be the highest priority technical issues followed by archival/storage and electronic signature. A number of respondents did not believe electronic FOIA or publishing to be an impediment.

Should the Yellow Book Be Changed to Recognize Electronic Audit Processes?

GAO has expressed an interest in possible revisions and has asked for the results of this question.

YES - 20	NO - 11
Comments:	*Comments:*
✓ Rather than just applying the current standards for hard copy, specific electronic standards should be established ✓ Paperless auditing meets the GAAS. Advanced computer technology is being used to audit more efficiently and effectively. However some guidelines need to be established for consistency ✓ Standards needed for electronic signature ✓ Authenticity of data review via computer. ✓ Spell out minimum requirements for paperless audits. ✓ Definitions/guidance needed for sufficient documentation for elec. records ✓ Standard needed for minimum system controls i.e. electronic signature ✓ Specific comments should be integrated to cover electronic documentation ✓ Acceptance of transactional evidence ✓ Provide flexibility for alternative methods	✓ Don't believe modifications are needed just because workpapers are in a different format. The same requirements should be met regardless. ✓ Paperless auditing is just another way to document audit evidence with less paper, we will never achieve paperless audit.

*   *   *   *   *   *

If Your Office Makes Audit Reports Electronically Accessible to the Public, What Formats are Used?

HTML	ASCII	PDF	Not Electronically Accessible
12	1	18	8

* * * * * *

Has Your Office Used an Electronic Storage System for Archiving Workpaper and Reports? If So, Which Application System is Used?

YES - 12	✻ Individual audits stored on diskettes; final reports stored on CD-ROM ✻ Zip Drives store MS Office 97 documents ✻ Win NT backups ✻ MS Office Suite ✻ Disks/Diskettes ✻ 2yscan
NO - 21	

Has Your Office Used Electronic FOIA Redaction Software Successfully?
 If So, Which Application?

Only one office has used electronic redaction software. The VA OIG designed their own , using Microsoft Word/Office and *has offered to make it available on request.*

* * * * * *

 What Encryption Software Do You Use or Plan to Use?

Only two offices are using encryption software, one is using TeamMate, the other is using
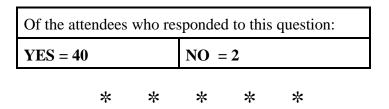
Lotus Notes.

<div align="center">*   *   *   *   *   *</div>

Does Your Office Use Electronic Signatures? If So, What Process Is Used?

Only four offices use electronic signature. One uses E-mail and memos, one uses Lotus Notes, one uses E-mail forms & procurement software (SAP), one did not identify what it uses.

<div align="center">*   *   *   *   *   *</div>

Should There Be Another Conference with Demonstrations of the Various Software Approaches?

Of the attendees who responded to this question:	
YES = 40	**NO = 2**

<div align="center">*   *   *   *   *</div>

Is Your Office Willing to Share Your Software (Modifications) and/or Expertise with Other Offices Trying to get Started with Electronic Auditing?

The following Offices Responded Affirmatively:

▸ LOC/OIG	▸ TRES/OIG	▸ DEd/OIG
▸ AFAA		▸ FDIC/OIG
▸ DOD/OIG		▸ NCUA/OIG
▸ SSA/OIG	▸ USAAA	▸ VA/OIG
▸ AMTRAK	▸ TVA/OIG	
▸ DOE/OIG	▸ DCAA	
▸ FEC/OIG	▸ EPA/OIG	▸ DOC/OIG

- ▸ USAID/OIG
- ▸ SBA/OIG
- ▸ NLRB/OIG
- ▸ FRB/OIG

Offices (*of those responding*) Interested in Working as part of a Consortium on Issues/Standards Revisions or Software Testing to Advance Electronic Auditing:

Office	Yellow Book (GAO)	Archiving (NARA)	Encryption (NIST)	Testing Software	Type of Software	Pooling Resources
LOC/OIG	✓	✓	✓	✓	Microsoft & WordPerfect	✓
AFAA	✓	✓	✓	✓	TeamMate	✓
EEOC				✓		
DOD/OIG	✓	✓	✓	✓		✓
HHS/OIG	✓					
AMTRAK/OIG				✓	Lotus Notes	✓
SSA/OIG				✓		
DOE/OIG			✓	✓		✓
OPM/OIG				✓	Lotus Notes	✓
NEH	✓	✓				✓
TRES/OIG		✓	✓			
VA/OIG	✓	✓	✓			
USAAA	✓	✓	✓	✓	TeamMate	✓

SBA/OIG	✓	✓		✓		✓
Tres/OIG	✓	✓	✓	✓		
TVA/OIG				✓	Lotus Notes	
DEd/OIG				✓	Lotus Notes	✓
FDIC/OIG	✓	✓	✓	✓	Lotus Notes	✓
NCUA/OIG				✓	TeamMate	
DCAA	✓	✓	✓	✓	MS Office 97	✓
VA/OIG	✓		✓	✓	MS Word Compatible	✓
DOC/OIG	✓	✓	✓	✓		✓
USAID/OIG	✓		✓	✓		
EPA/OIG	✓	✓	✓	✓		✓

Conference Evaluation

Overall Rating **1.46** on a scale of 1 to 5 (1 highest and 5 lowest)

Question	*Rating*
A. This topic is important and timely to my office and the industry.	**1.2**

B. The Conference was interesting and useful in directing future
   decisions and actions.   **1.5**

C. The facility was comfortable and accessible.   **1.5**

D. The program was well planned and carried out   **1.4**

E . The speakers were prepared and interesting.   **1.6**

 F. My office is interested in pursuing the ideas and opportunities presented   **1.6**

G. What are your ***suggestions*** for improvement.

-Incorporate information on using paperless documents to be audited
-Would like to see demonstrations. Several of us got lost in the details.
-Overall, a good conference. It would have been good to see demos of the software
-Excellent conference. With staff of 5 it's a different road. We are looking into VA system
-Would like to see demos and handouts of presentations
-Good job. More discussion and sharing of ideas are needed
-Make the conference 2 days and invite vendors to exhibit/demonstrate software
-Would like demonstrations and breakout into working groups
-Would have been helpful if the speakers hade prepared handouts
-Make agency cost/benefit, problems/solutions analysis studies readily accessible via the Internet
-Looking forward to a demonstration conference
-Take one or two topics of the most interest and explore them more in depth
-Change the conference style set-up, seats were uncomfortable when sitting sideways
-Visuals are an asset to verbal presentations.

-Need better chairs for so many hours.
-Have demos of the different software capabilities.
-Post the proceedings and results of survey on IGNet

Conclusions from evaluations:

The Conference was well received. There seems to be a strong sentiment for a follow-up program with demonstrations of software and greater opportunities for offices to converse and share ideas directly. Also, speakers would have been more effective with visuals and handouts.

Prospective Follow-up Actions

1. Develop a follow-up conference on paperless auditing featuring demonstrations of three or four of the most successful auditing software packages.

2. Coordinate creation of consortia of interested audit offices for the purpose of collaborative discussion on common topics and issues, including pooling resources and testing software. Identify consortia leaders and members.

3. Create a forum through the IGNet/FinanceNet for ongoing dialogue, sharing ideas and best practices and posting new information about related topics, requirements, advances, technology and standards.

4. Develop specific industry-wide projects for appropriate changes to, or development of standards and related issues such as training, processes and procedures, and reporting formats.

5. Electronic redaction software is available upon request from the Dept. of Veterans Affairs OIG to immediately implement EFOIA requirements.

6. Representatives from PCIE/FAEC should meet with GPO & NTIS (National Technical Information Service was not represented at the conference, but offers an electronic publication storage and distribution service similar to GPO) on establishing a central repository for all electronic audit reports made available to the public linked to IGNet and individual OIG/agency web pages. Presentations could be made at PCIE (IGNet) & FAEC meetings to introduce services, advantages and costs.

7. Coordinate meeting of representatives of PCIE/FAEC with NARA and NIST to discuss process for attaining special accommodations in standards and requirements for archiving and security/encryption by audit offices or through host service agencies (GPO/NTIS) for electronic storage and publication of working papers and reports.