

## Electronic Records Management

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## University of Cincinnati Records Management

### **Microfilming**

Microfilming offers several advantages as a medium for record storage: space savings, archival stability, legal acceptance, high image quality potential, vital record protection, and duplication for security storage off-site. Microfilm is a convenient storage medium for bulky records which require little weeding and which must be kept for extended periods, or for vital records which must be retained securely or indefinitely. However, microfilming is expensive, particularly in terms of document preparation. It is often less expensive to utilize low-cost storage.

If the decision is to microfilm, an archival copy using silver gelatin film should be made and stored in an alternate location for security. Working copies should be made of diazo or vesicular film which, with proper care, should provide up to 100 years of useful life.

### ***Electronic Records Management***

University machine-readable records, that is, records which are created and maintained in electronic form for administrative purposes, are subject to the same requirements for records management as are paper and microform records. They are inventoried, scheduled and disposed under the same procedures.

### **Media Migration**

Electronic media changes and advances at an astounding rate. In addition to the media itself, it is difficult to obtain the hardware needed to read the media. Gone are the days of punch cards, 8" and 5 ¼" floppy disks and 3 ½" disks are on the way out, with few new machines being manufactured with the drives to read them. To insure that your data stored on electronic media can be accessed in the future you need to establish a plan to migrate the data.

### **Care and Preservation**

#### Compact Discs

- Always store discs upright in their plastic cases or paper folders when not in use.
- Use a non-solvent-based felt-tip permanent marker to mark the label side of the disc.
- Return discs to storage immediately after use.
- Only handle discs by the edges or the center hole and use clean hands when handling discs. Never touch the surface of a disc.
- Store discs in a cool, dark environment.
- Only clean discs when it is absolutely necessary, when surface dirt is visible and/or readability or playability is impaired.

If discs do require cleaning, use the following methods:

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- For surface dust or dirt blow lightly on the disc.
- Lightly rub the surface with a soft cloth. Never use paper or any abrasive material.
- For stubborn dirt use commercial CD/DVD cleaners or isopropyl alcohol along with a soft cloth.
- When wiping discs, always wipe from the center to the outside edge.

#### Floppy Disks (5 1/2" and 3 1/4")

- The disk and its environment must be free from sticky fingers, food, dust, and other contaminants that can destroy data on the disks.
- Exposed areas of the disk should never be touched. Handle the disk only by the edges. (3 1/4" floppy disks have only a small exposed area.)
- 5 1/2" disk drives and the read/write heads must be regularly cleaned.
- Disks should not be folded or be secured by paper clips or rubber bands. Any writing on the label should be done before it is attached to the disk, or by lightly using a felt-tipped pen. Do not erase a label already affixed or attach a new label on top of a previous one. Remove the existing label and replace it. After use, return the disk to its sleeve. Note: Do not put labels over the metal surface on the disk, this surface must move.
- Floppy disks are to be stored in a rigid container in a vertical position with no pressure on the disks. They should be stored at a temperature between 50 and 125 degrees Fahrenheit with a relative humidity range of 8% and 80%.
- Sources of magnetic fields should be kept away from disks. Disks should not be placed on top of the computer Central Processing Unit (CPU).
- Use proper "write protect" tabs to prevent accidental erasing or overwriting of data on disks.
- Data on floppy disks should be copied onto new disks every 2 years, and the old disks erased, to ensure integrity of data.

Magnetic Tape (Based on Geller, Sydney B. *Care and Handling of Computer Magnetic Storage Media*. National Bureau of Standards Special Publication 500-101. Washington, D.C. June 1983.)

- Magnetic tape storage areas require a controlled environment free from dust, smoke, and high intensity magnetic fields.
- Fluctuations in temperature and humidity are to be minimized. Temperature should range between 62 and 68 degrees Fahrenheit; the relative humidity should be 40%.

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- Magnetic tape should be stored in an upright position on a metal rack in plastic containers which support the reel at the hub. There should be external identification labels.
- Stored tapes should be cleaned and rewound under constant tension ever 1-2 years. Tapes should be examined once a year for physical deterioration such as broken reels.
- A sample of stored tapes needs to be tested for "read errors" (to see if data can still be used) once every 1-2 years. If errors are found, additional tapes should be examined.
- Data should be transferred to new tapes every 10 to 20 years, depending on storage conditions, maintenance practices, and the results of sample testing.
- Security, or backup, copies of machine-readable record must be maintained for the duration of the scheduled retention period. Backups may be electronic format, microform, or hard copy. The security copies are stored in another location.

#### Admissibility of Archived Computer Records

In the State of Ohio, computer records may be audited and may be admitted as evidence in a court of law much the same as with paper and microform media.

In order for electronic records to be legally acceptable, it must be possible to verify that:

1. Records retention schedules and local policies concerning access, security backups, and data entry have been followed.
2. The information stored electro-magnetically is: Recorded in the normal course of business; Recorded within a reasonable time after the event or transaction and includes an audit trail showing which data have been altered, when, and by whom; and Audited to establish the trustworthiness of the information.
3. The computer media archived is both prepared properly prior to recording data (e.g., formatting) and that it is properly maintained in storage.

#### Labeling Computer Files

Files which cannot be identified because of poor external and internal labeling are useless.

Systems vary in the options provided for labeling tapes, diskettes and other forms of magnetic media, but it is important to use every means available. In addition to labeling the outside of a diskette or tape, enter the date and if necessary, the time when a file was used. On the office automation or other mainframe system, enter password and terminal designation.

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Make file names as recognizable as possible. On microcomputers, the optional extension characters may be used for file names to indicate the creator's initials or as mnemonics for the type of document, for example COR (correspondence), MEM (memoranda), BUD (budget). Store different record series on separate disks. If machine-readable files contain confidential materials, coded filenames discourage unauthorized access. Note: Not applicable after Windows 95 as extensions have meaning.

A written Departmental or office policy dealing with labeling computer files, as well as security and access considerations makes it easier to work with these records in the future, as well as to audit, if necessary, admit them in a court of law.

### ***Email Management***

Electronic communications systems in use at the University include, but are not limited to, office automation, E-mail, and Internet facilities maintained by the C.I.T.S., and local area networks maintained within colleges and other administrative units of the University.

Electronic mail created and received by employees of the University of Cincinnati during the course of business can be an official University record, and as such falls under the purview of the University Records Management Program. Additionally, the University's computing resources are limited physically and financially in the amount of online storage which can be provided to users with electronic mail accounts. For both of these reasons, the following guidelines are important in ensuring effective, efficient and legal retention and disposition of electronic mail.

1. Retain delivery and read receipts only if legally required. Generally these should be deleted and purged once they have been read.
2. Delete and purge all junk mail once read. If there is anything a user feels will be of later use, it should be printed and filed as hard copy.
3. Delete and purge C.I.T.S. systems notifications once they have been read.
4. Print and file routine correspondence and inter-office memoranda and retain until no longer administratively useful. Purge and delete electronic copies.
5. Print out and file executive correspondence, that of administrators with the rank of Department Head and above and Faculty. Such correspondence documents administrative decision-making, committee, faculty, and campus activities and is retained in hard copy for 3 years or until no longer administratively useful, and then transferred to the University Archives. Electronic copies should be deleted and purged daily or weekly, depending upon the volume of use.



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Strategic Plan for  
Electronic Records (2000)

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## Strategic Plan for Electronic Records (2000)

### Keeping the Whole Record:

A Strategic Plan for Managing and Preserving  
The University of Connecticut's  
Knowledge Assets in the Digital Century

#### Executive Summary

##### Statement of the Problem

The University of Connecticut (UConn) is facing significant changes in the way it conducts and documents business. UConn is moving rapidly toward relying on information that exists solely in electronic form to support the University's core business activities. Examples include:

- the introduction of the integrated Student Records system,
- the ubiquitous nature and growing importance of electronic mail messages,
- the expansion of the role of web resources, and
- the implementation of the fiscal data warehouse.

At this point, however, UConn cannot ensure that its information resources will be available for a longer period of time than the short active life span of information in a systems environment. Thus, at some future point, UConn may not be able to locate, let alone use necessary "accurate, reliable and authentic information" regarding actions, decisions and business transactions.

This "accurate, reliable and authentic information" is characterized as a KNOWLEDGE ASSET. It is used to communicate valuable information externally and internally. The value of this information is derived by assessing the cost of replicating or reacquiring the information, the cost of conducting business without this knowledge, and lost opportunities because of the inability to access this information quickly, or at all. Knowledge assets, as applied in this report, refer to administrative resources, and do not include academic research materials or other information resources created through the fulfillment of the University's academic functions.

The emerging digital environment is supplanting a paper-based environment in which critical information was maintained exclusively on paper and information of long-term value was transferred to the University Archives where it was preserved and available for use. Thus, the University now faces the choice between maintaining a partial or a complete documentary record as it moves into the highly digital milieu.

#### Proposed Solutions

The plan focuses on a single strategic goal: The University of Connecticut will be capable of producing, maintaining and retrieving the body of knowledge that originates and is maintained in digital form, both now and into the future. To achieve this goal the plan presents three objectives that focus on providing service and support, developing policies and practices, and identifying roles in the emerging digital infrastructure. Each goal contains several action items. The plan also presents an outline for the first year of activities of the proposed program.

**Objective 1 : Provide service and support for the University's administrative business units to enable them to better identify the University's core information assets and to assist them in their capacity as stewards of those assets.**

**Action 1.1 : Conduct a core Knowledge Asset inventory (KAI) to identify UConn's critical information assets.**

UConn's major programs obviously are dependent on reliable, accessible information to accomplish their business. In most program areas, staff have developed approaches to managing information resources under their control that ensures the University's day-to-day operational needs are met. However, the University is unable to identify the "official" source of complete, accurate and authentic documentation for many of its business activities. An inventory of "knowledge assets" would enable UConn to locate its critical information resources, identify existing "best practices" in program areas and develop a program to ensure that all of UConn's knowledge resources are effectively managed and appropriately used throughout the University.

**Action 1.2 : Develop a training, education and assistance program on information management.**

Line staff would benefit from training and education workshops that enables them to understand both the value of their information assets and methods for managing those assets. The University Archives, in partnership with other business units, should provide this training.



RECORDS  
CENTER

## UNIVERSITY OF GEORGIA RECORDS CENTER

DESTRUCTION  
OF RECORDS

STORAGE  
& RETENTION  
REQUIREMENTS

ACCESS TO  
RECORDS

ELECTRONIC  
RECORDS  
POLICY

RECORDS  
FORMS

Departmental  
Records Officer  
Form

File Retrieval  
Form

Box Transfer  
Form - Destruction

Box Transfer  
Form - Storage

HARGRETT  
LIBRARY

### *Electronic Mail (Email) & Electronic Records*

**Electronic mail created or received by University of Georgia employees in connection with official business is subject to the state record laws and the retention requirements of the Board of Regents.** Just because such communication is transmitted digitally and easy to delete does not keep it from being an official record.

When electronic mail documents University business, a **record copy should be printed on paper**, filed appropriately for future access and preserved or destroyed according to the Regents' retention policy. Given the vulnerability of electronic records, we suggest that this printing be done routinely, ideally upon receipt of a communication. In addition to preserving the communication, filing a paper print promotes future ease of retrieval and interpretation.

**Electronic records** bring new challenges to your role as a records manager. Even with careful storage, current magnetic and optical storage options cannot begin to match the life of properly stored acid-neutral paper or microfilm. This may not matter if the material has a short record life according to the retention schedules, provided the medium is carefully stored during its useful life, safe from potential destruction or deterioration. Preservation of the data, however, may not even matter if the machinery and software required to read it are not available in the future.

Just as the electronic record can be difficult to preserve, it can also be difficult to destroy when its retention schedule has been met. Simply hitting a delete key may not actually remove all trace of a record. Careful planning is needed to be certain that private information, such as that protected by [FERPA](#), is not inadvertently released through inadequate protection or destruction of electronic records.





If contemplating a move from paper to electronic records, be certain that your electronic records can meet current standards for preservation, as well as security, privacy and any other legal requirements. Excellent guides that take into consideration legal, technical and planning issues are available on the [Georgia Secretary of State's Records Management web site](#).

While we certainly are not technological experts, the UGA Records Management Program is always available to discuss electronic records issues.

Contact the Records Center:

Phone (706) 369-5926 | FAX (706) 227-5335  
[reccentr@uga.edu](mailto:reccentr@uga.edu)



	<b>Archives and Records Management</b>	
		
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<b>RECORDS CENTER</b>	<h2>Electronic Records</h2>	<a href="#">BOR Retention Guidelines</a>
• <a href="#">Transferring Records</a>	<p>Electronic documents are also subject to the same records retention guidelines which govern paper-based records. Even though electronic records present fewer problems in terms of physical storage space, appropriate measures should be taken to comply with records retention guidelines. Electronic records, including email, pose the same kinds of litigation risks as those associated with paper-based records.</p>	<a href="#">Record Transfer Form</a>
• <a href="#">Accessing Records</a>		<a href="#">Box Label</a>
<b>RETENTION REQUIREMENTS</b>		<a href="#">Record Retrieval Form</a>
• <a href="#">Secure Destruction</a>		<a href="#">Records Decision Tree</a>
• <a href="#">Vital Records</a>		
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## Special Collections and Digital Programs

### RECORDS PROGRAM

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#### Electronic Records

#### General Statement

In today's university environment, employees create and maintain an increasing portion of their records using computers. Electronic records must be managed alongside traditional records to ensure compliance with state and federal regulations and to preserve institutional history. In fact, Kentucky's definition of a public record includes any possible media: "all books, papers, maps, photographs, cards, tapes, disks, diskettes, recordings and other documentary materials, regardless of physical form or characteristics, which are prepared, owned, used, in the possession of or retained by a public agency" (KRS 171.410 [1]). Employees must be aware that Kentucky's Public Records (KRS 61.870-884) and Open Records (KRS 171.410-740) laws cover all U.K. records, including electronic mail and other electronic records.

The management of electronic records follows many of the same principles used to manage traditional records. As with all university records, the first step is applying the State University Model Records Retention Schedule. The Model Schedule lists types of records and their appropriate retention period. Retention periods listed in the Model Schedule apply to records regardless of their medium.

Examples of common electronic records:

- electronic mail
- databases
- Web sites

In this rapidly evolving electronic age, there also exists records whose creation and existence cannot be separated from the media in which they were created. For example, such records would be systems database or computer operations files. The state has recently approved a general schedule which is available at: Electronic Schedule, for these types of electronic and related records.

The University Archives and Records Program recognizes that electronic records present special challenges, and program staff will work with University units to help them apply the Model Schedule to their electronic records. Once the proper retention periods have been determined, UK's Computing Center will assist units by retaining, migrating, or destroying data as instructed.

For assistance with electronic records, call (859) 257-5257.

#### Electronic Mail

Work-related e-mail is a university record, and must be treated as either record series U0100 or U0101. Each e-mail user must take responsibility for sorting out personal messages from work-related messages and retaining university records as directed in the Model Schedule. E-mail users should arrange their e-mail folders to simplify this process:

- personal folders for non-work-related messages
- non-permanent work folders for items covered by U0101
- permanent work folders for items covered by U0100

E-mail may also be printed and retained as a paper record. Be sure that print-outs retain complete header information (to, from, date, subject). E-mail print-outs may be filed with other paper correspondence or separately. If messages have been sent using a distribution list (email group name), the sender must maintain a record of the distribution list for as long as the message is retained.

When e-mail is used as a transport mechanism for other record types, the record being transported must be administered according to the Model Schedule (as noted above, the media of the record does not affect its retention).

Please see the Kentucky Department for Libraries and Archives (KDLA) Understanding Records Management: E-Mail Records for more information concerning the management of e-mail records.

#### Web Sites

Web sites are also an electronic records concern, particularly as more and more records are being

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## The Ohio State University Archives

### eLECTRONIC RECORDS: AN OVERVIEW

Rec MONIT eMAIL DEFINITIONS SCHEDULES DISPOSITION TRANSIENT RIM LINKS LAWS & REGS

**Mention "electronic records" in a crowded room and all conversation may come to a halt..**

Not necessarily out of interest (or lack thereof), but more often than not out of fear of the unknown. Electronic records are perceived to be more mysterious than their analog paper counterparts. The advice contained in this niche of cyberspace is meant to dispel that myth.

Electronic records or more accurately "technology dependent records" are those records that are not eye readable without some intervening technology, and:

- may be born-digital or converted
- may be created via computing devices, scientific and medical instrumentation, communications equipment, and audiovisual equipment
- exists in a variety of types including but not limited to: text, images, moving images, sound, databases, spreadsheets, geographic information systems (GIS), data warehouse, and specialized application.

On this page we will discuss:

- Ⓢ **Characteristics of a Trustworthy Electronic Record**
- Ⓢ **Electronic Records Management Challenges**
- Ⓢ **EDMS/ERMS/ECM Explained**
- Ⓢ **Preservation Concerns & Possibilities**

#### CHARACTERISTICS OF A TRUSTWORTHY ELECTRONIC RECORD:

There are four essential characteristics used to describe trustworthy records from a records management perspective:

- **Reliability:** A reliable record is one whose content can be trusted as a full and accurate representation of the transactions, activities, or facts to which it attests and can be depended upon in the course of subsequent transactions or activities.
- **Authenticity:** An authentic record is one that is proven to be what it purports to be and to have been created or sent by the person who purports to have created and sent it. A record should be created at the point in time of the transaction or incident to which it relates, or soon afterwards, by individuals who have direct knowledge of the facts or by instruments routinely used within the business to conduct the transaction. To demonstrate the authenticity of records, organizations should implement and document policies and procedures which control the creation, transmission, receipt, and maintenance of records to ensure that records creators are authorized and identified and that records are protected against unauthorized addition, deletion, and alteration.
- **Integrity:** The integrity of a record refers to it being complete and unaltered. It is necessary that a record be protected against alteration without appropriate permission. Records management policies and procedures should specify what, if any, additions or annotations may be made to a record after it is created, under what circumstances additions or annotations may be authorized, and who is authorized to make them. Any authorized annotation or addition to a record made after it is complete should be explicitly indicated as annotations or additions. Another aspect of integrity is the structural integrity of a record. The structure of a record, that is, its physical and logical format and the relationships between the data elements comprising the record, should remain physically or logically intact. Failure to maintain the record's structural integrity may impair its reliability and authenticity.
- **Usability:** A usable record is one which can be located, retrieved, presented, and interpreted. In any subsequent retrieval and use, the record should be capable of being directly connected to the business activity or transaction which produced it. It should be possible to identify a record within the context of broader business activities and functions. The links between records which document a sequence of activities should be maintained. These contextual linkages of records should carry the information needed for an understanding of the transaction that created and used them.

An organization needs to consider these characteristics when planning to implement an electronic recordkeeping

system and/or electronic signature technology so that it can meet its internal business and legal needs, and external regulations or requirements. The degree of effort an organization expends on ensuring that these characteristics are attained is dependent on the organization's business needs or perception of risk. Transactions that are critical to the business operational needs may need a greater assurance level that they are reliable, authentic, maintain integrity and are usable than transactions of less critical importance.

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#### **ELECTRONIC RECORDS MANAGEMENT CHALLENGES:**

A generation ago one would dictate a letter to an assistant who would type and file the document in an appropriate manner; being a part of the record management process that person would handle the regular disposition of those records. With the advent of the personal computer more and more of us are directly responsible for creating and filing our own documents without the benefits of training within the records management process, which leads to inadequate institutional control over the creation and maintenance of records. Further complicating matters is that of the issue of **preservation (which is discussed below)** and that:

- the documents and records we now create are dependent upon technology to interpret them, and more often than not, they are dependent upon specific hardware and software system combinations, some which are proprietary and unique
- there are a lack of institutional policies and guidelines addressing the management of electronic records
- there are a lack of affordable tools to appropriately and effectively manage electronic records
- without effective tools and/or institutional policies and guidelines for filing and managing records, the usability, locatability and accessibility to the records may be compromised
- the low cost of electronic storage does not encourage individuals to manage their records by **disposing** of records who's lives have expired
- there is a greater risk for potential security breaches and damage via virus attacks .
- there are significant risks of records loss or damage due to instability of storage media
- the unmanaged proliferation of copies, even in paper, that while they provide redundancy from a backup point of view, they can ultimately wreak havoc with completing a final disposition process
- the changes in the **Federal Rules of Civil Procedure (FRCP)** specifically identifies electronic records, including backups and unknown copies, as discoverable

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#### **EDMS/ERMS/ECM EXPLAINED:**

When identifying and purchasing electronic records management tools one needs to understand the industry's "alphabet soup". There are three basic system types that one should understand:

- **Electronic Document Management System (EDMS):** An EDMS is a software system that controls and organizes documents throughout an organization, whether they have been declared as records or not. Depending upon the product, an EDMS may be as small as a stand alone desk top system or as large as an enterprise wide server-based system. An EDMS typically may include:
  - document and content creation
  - document and content capture
  - document and content editing and revision
  - image processing
  - document workflow/business process management (BPM)
  - document repositories
  - Computer-Output Laser Disk/Enterprise Report Management (COLD/ERM) and other output systems
  - information retrieval functionality
- **Electronic Records Management System (ERMS):** An ERMS is a software system that allows an organization to assign a specific life cycle to individual pieces of organizational information. Like an EDMS, they may be as small as a stand alone desk top system or as large as an enterprise wide server-based system. Unlike an EDMS one cannot edit or revise documents or content once they are declared in an ERMS. An ERMS has the functionality to:
  - receive of records
  - use records
  - manage and maintain electronic records
  - manage paper-based and other analog records
  - manage the disposition of records
- **Enterprise Content Management (ECM):** An ECM system, the evolutionary successor to an EDMS, is a software system that has tools and methods utilized to capture, manage, store, preserve, and deliver all forms of content (not just documents and records) across an enterprise. In addition to the tools found in an EDMS and an ERMS an ECM system has:
  - collaboration tools
  - digital asset management tool
  - web content management tools

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## PRESERVATION CONCERNS & POSSIBILITIES:

Preservation of electronic records which have a long term or indefinite/permanent retention may be the single biggest "fear factor" in contemplating management of electronic records. Moore's Law (original coined by Gordon Moore, founder of Intel, and meant to describe growth in the number of transistors/square inch able to fit on a silicon chip, and now generally attributable to all computer technology) suggest that there will be significant computing changes every 18 months to 2 years. This leads to a significant amount of obsolescence in a short amount of time in regard to file formats, hardware, and software. Since electronic records are dependent upon this technology to be interpreted, this is a significant problem to which there are no "silver bullets". Where we once had to consider "migrations" only after many years, decades, or even centuries, we now must consider them every 5 to 10 years. Although there are no "silver bullets" there are currently several approaches we may take to preserve our electronic records:

- **Migration:** Migration occurs when one copies the file to a new storage medium or when the bits in a file or program are altered to make them readable by new hardware and operating systems
  - *PRO:* Data is fresh & instantly accessible
  - *CON:* Copies degrade from generation\*
- **Emulation:** Emulation occurs when one writes software mimicking older hardware or software, tricking old programs into thinking they are running on their original platforms.
  - *PRO:* Data doesn't need to be altered
  - *CON:* Mimicking is seldom perfect; chains of emulators may eventually breakdown\*
- **Encapsulation:** Encapsulation occurs when one encases digital data in physical and software "wrappers," showing future users how to reconstruct them.
  - *PRO:* Details of interpreting data are never separated from data themselves
  - *CON:* Must build new wrapper for each new format & software release; works poorly w/non-textual data\*
- **Convert to Acid-Free/Alkaline Buffered Paper,** by printing an electronic document and storing it in a traditional manner.
  - *PRO:* Enhanced longevity; no specialized machinery necessary to read
  - *CON:* Potential loss of dynamic functionality (spreadsheets, databases, html, etc) and significant additional physical storage space
- **Convert to Archival Quality Microfilm,** by writing the digital file to microfilm via a digital archive writer.
  - *PRO:* Enhanced longevity (300-500yrs)
  - *CON:* Potential loss of dynamic functionality (spreadsheets, databases, html, etc); b&w only; magnification needed

\* Adapted from *Data Extinction*, by Claire Tristram, October 2002 MIT Technology Review

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For additional information contact Dan Noonan, Electronic Records Manager/Archivist @ 247.2425 ([noonan.37@osu.edu](mailto:noonan.37@osu.edu)).

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The screenshot shows the Ohio State University Archives website. At the top, there is a navigation bar with 'The Ohio State University www.osu.edu' and links for 'Help', 'Campus map', 'Find people', 'Webmail', and a search box. Below this is the Ohio State University logo and the text 'University Libraries ▣ University Archives'. A secondary navigation bar contains links for 'OSUL Home', 'Find', 'Borrow', 'About OSUL', 'Libraries', 'Learn', 'Off-campus Sign-in', 'My Record', and 'Help'. On the left side, there is a vertical menu with links: 'Byrd Polar Archives', 'John Glenn Archives', 'Records Retention & Management', 'University Manuscripts', 'University Photo Archives', 'Archives Main Menu', and 'Online Exhibits'. The main content area is titled 'The Ohio State University Archives' and features a sub-header 'eMail Management: AN OVERVIEW'. Below this is a navigation bar with links: 'REC MGMT', 'eRECS', 'DEFINITIONS', 'SCHEDULES', 'DISPOSITION', 'TRANSIENT', 'RIM LINKS', and 'LAWS & RECS'. The main text begins with the heading 'IS EMAIL A RECORD? WELL THAT DEPENDS...' followed by a paragraph explaining that email is not a record type or series but a means of conveying information. It then asks 'WHAT IS EMAIL?' and lists components: textual message, metadata (To, From, Subject, Time, Date, System, etc.), and attachments. A paragraph follows, stating that each component is part of the record or non-record. At the bottom of the main content area, there are two circular icons: 'eMail Management &' and 'eMail Storage'. Below the main content is a section titled 'EMAIL MANAGEMENT:' with a paragraph and a list of guidelines for managing email.

#### EMAIL MANAGEMENT:

The key to effectively managing email is to get rid of the **non-records** and any **transient/transitory records** that have outlived their administrative/legal/fiscal value as quick as possible so that one is left with a small percentage of what they have sent and/or received, that truly needs to be managed on an on-going basis. One should approach the management of email in a manner similar to how they handle processing their "snail mail" at work and home:

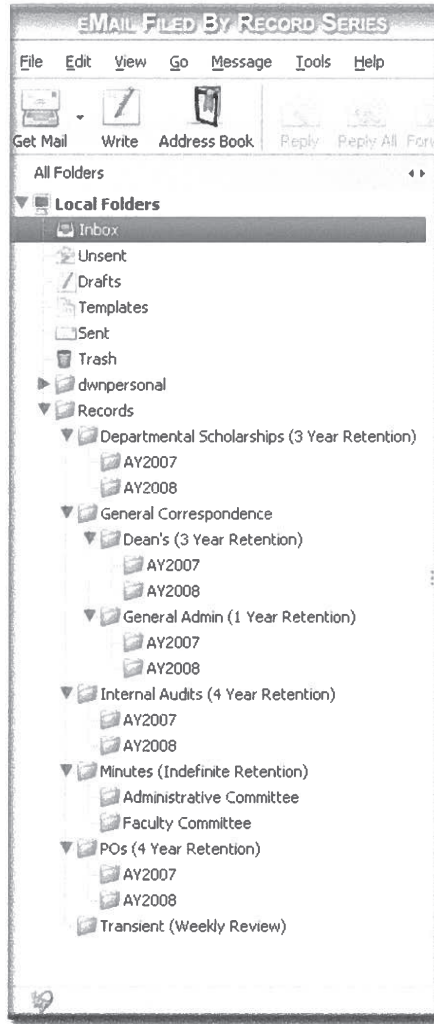
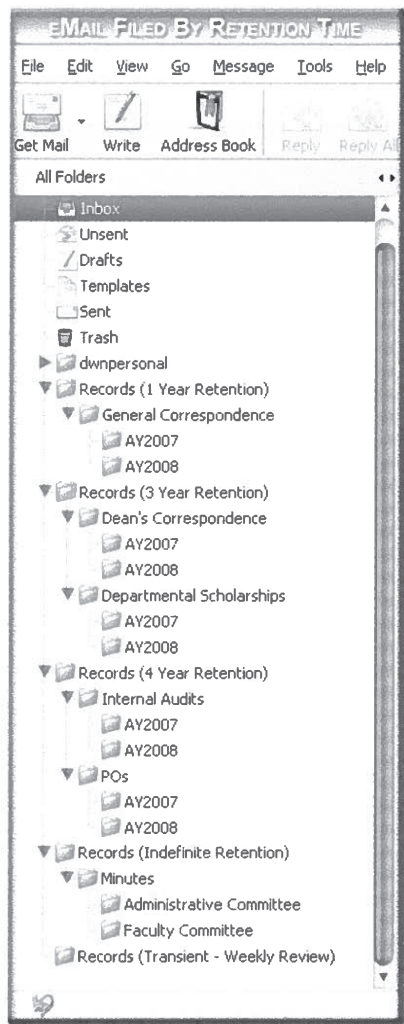
- Open the email and review the document's content; this may mean thoroughly reading the document, but more often than not, one is able to judge just by a cursory look at the document, the subject line, and/or the sender:
  - **If it is a non-record**, one should delete the message outright, just as one would dump the "snail mail" non-record into the trash can or recycle bin;
  - **If it is a transient/transitory record**, then place it in a folder or sub-folder (analog or digital) that is designated for periodic review and dispose of as soon as allowable. One might create a "Transient/Transitory" folder or create sub-folders of **record type/series** or projects for the transient/transitory messages.
  - **If it is a record**, place it in an appropriate folder by **record type/series**, project, retention time, or other filing schema that works for one's office/organization and allows that unit to effectively manage the life cycle of the record.
- Categorizing and managing email is much more straightforward when we utilize intelligent and information rich "Subject Lines". Additionally, some simplistic subject lines like, "Hi!" are treated as SPAM or a potential virus containing email. Below are several examples of **bad** subject lines, along with **good** alternative subject lines

that are more meaningful:

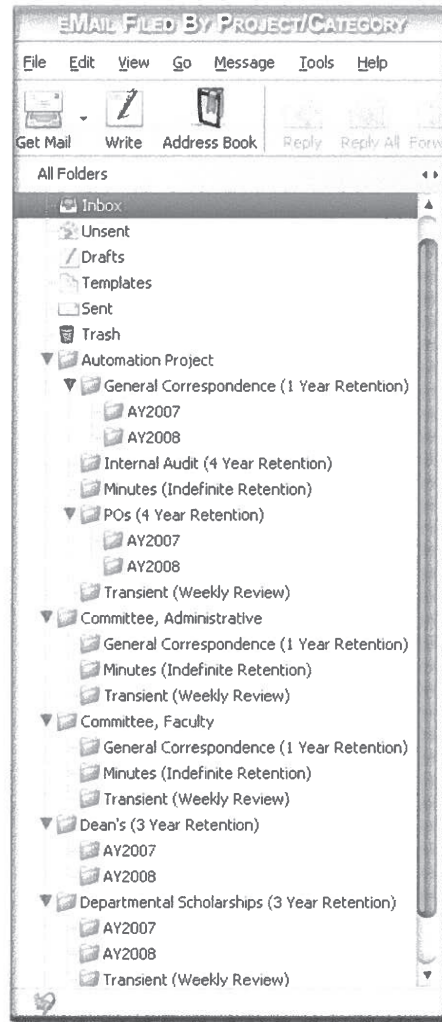
- **Bad: Minutes**
- **Good: Minutes Executive Committee 20070630 OR Minutes Executive Committee June 30, 2007**
- **Bad: Available?**
- **Good: SIS Project Meeting Tuesday (7/4) @ 2PM - Are you available?**
- **Bad: Meeting**
- **Good: Seismic Project Meeting Tuesday (7/4) @ 2PM - Agenda Attached**
- **Bad: Email Question**
- **Good: Need advice regarding email management**
- Below are three images that conceptually demonstrate examples of email filing schema:
  - **Example 1:** the email is stored in folders labeled with retention time (as per **OSU General Schedules**) as the highest level in the hierarchy;
  - **Example 2:** the email is stored in folders labeled with record series (as per **OSU General Schedules**) as the highest level in the hierarchy.
  - **Example 3:** the email is stored in folders labeled with project names and/or categories as the highest level in the hierarchy.

# OHIO STATE UNIVERSITY: eMail Management: An Overview

<http://library.osu.edu/sites/archives/retention/email.php>







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#### EMAIL STORAGE:

*What is the best way to store email?* Below we discuss the **near-line**, **on-line**, **off-line** and **near-line/off-line** hybrid storage options in detail. While a **near-line** storage solution would be optimum, reality typically dictates one's best course of action is to utilize an **on-line** storage option of maintaining it in the email system, especially if the messages are retained on the server, not the desktop.

- **NEAR-LINE STORAGE:** Near-line storage requires the removal of the email message, its metadata, and attachments from the email system to store it in an **electronic records management system (ERMS)**. Since the messages are to be stored in an ERMS, it is presumed that the decision making process has been made in declaring the messages as records or non-records, and that the appropriate filing decisions are being made to effectively and efficiently manage the life cycle of the messages.
  - **Advantages:** Ability to "fix" and declare it as a **record**; automated life cycle management; ease and

timeliness of access; searchability.

- **Disadvantages:** Loss of functionality as an email and subsequent re-use.

- **ON-LINE STORAGE:** On-line storage is the storing of email messages, along with their metadata and attachments, in the email system. If one is choosing this option, an organization should maintain its storage folders, messages and attachments on the email server or a network attached server, as opposed to a desktop computer in local folders. This is due to the fact the the servers are typically backed up on a regular schedule in an automated fashion, whereas desktop computers are rarely if ever backed up. In the event of a disaster, one needs to be able to restore their records to maintain business continuity. Further, when choosing this method one has to be diligent in deleting of non-records immediately and disposing transient/transitory records as soon as possible on a regular basis, so as to not "bog-down" the email operating system.

- **Advantages:** Ease and timeliness of access; searchability; re-use.

- **Disadvantages:** Unable to truly "fix" email as a record; manually manage the life cycle.

- **OFF-LINE STORAGE:** Off-line storage is the printing, filing and storing of e-mail messages and attachments in a paper-based filing system. One has to be deliberate in capturing both the message and its attachments.

- **Advantages:** Ability to "fix" and declare it as a **record**; ability to integrate with other paper-based records.

- **Disadvantages:** Loss of functionality as an email and subsequent re-use; potential loss of metadata; not electronically searchable and retrievable.

- **NEAR-LINE/OFF-LINE HYBRID:** Near-line/Off-line storage is the "printing" e-mail messages and attachments to an electronic file format such as a TIFF image or a PDF. The resultant files can then be stored in a near-line or off-line manner (in this instance off-line meaning the desktop computer or other storage server). One has to be deliberate in capturing both the message and its attachments.

- **Advantages:** Ability to "fix" and declare it as a **record**;electronically searchable and retrievable.

- **Disadvantages:** Loss of functionality as an email and subsequent re-use; potential loss of metadata; may not actively be managed in an ERMS.

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For additional information contact Dan Noonan, Electronic Records Manager/Archivist @ 247.2425  
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## Penn State University Archives

### Records Management

#### University Guidelines On Retention Of E-Mail

Correspondence and other documents sent by e-mail MAY constitute a University record. As such they may need to be retained for longer than an e-mail system is capable of retaining them. It is the responsibility of the sender/recipient to determine if a particular e-mail message constitutes a University record.

If an e-mail message is a University record (as defined in AD-35) it is subject to the same retention period as the paper equivalent. E-mail messages which require long-term retention should be either retained electronically on retrievable media or printed, including all header and transmission information, and filed with their electronic or paper equivalents by the sender/recipient.

In a court of law, liability can become involved when such documents (paper or electronic) are not available to be provided during some segments of litigation. Be aware that your decision to retain or destroy an e-mail message may become an issue in a court situation.

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