

Document and Records Management: Understanding The Differences and Embracing Integration

White Paper

Priscilla Emery September 2003

President e-Nterprise Advisors





Introduction

Records Management and Archiving practices have become an extremely visible topic in the last year or so. With increasing angst with regard to the safety of both personnel and organizational information and the growing number of investigations into the fiduciary soundness of several notable organizations, such as *Enron, Worldcom* and others, record keeping has now gained new respect.

Unfortunately, confusion still abounds when it comes to understanding exactly what Records Management and Archiving really is and how it is differentiated from Document Management and other information management strategies. Although, in many enterprises it is recommended that these strategies be linked together, it is still important to understand the differences between them so that key functions and procedures are not overlooked.

Even the word "archive" is used in various ways that can confuse buyers and sellers alike. To some people archive means saving just about everything – to a records manager archive means saving the right things for a specified length of time.

The form that documents and records take has also evolved dramatically in the last several years. More than 10 years ago, when electronic imaging was at its infancy, this writer pointed out that "paper is the symptom – not the disease." The disease is finding the information we need at the right time in order to efficiently address business requirements and to make effective decisions. Unfortunately, the disease has now reached a chronic stage. Paper is still plentiful but e-documents such as word processing files, spreadsheets, photos, video, sound recordings and other unstructured information sources are proliferating across many organizations at an exponential rate. Add to this mix the explosion of e-mail-based documents used as part of the process of enhancing the pace of communication and organizations have the potential to drown in their documents.

Records vs. Documents: Understanding the Difference

A document (whether in electronic form or paper) is the basic communication device in what is considered unstructured form (as opposed to structured data records – which in some cases can be embedded within different electronic documents) that is used in most organizations. Document management (DM) systems were and still are developed to provide a library and/or repository where documents can be created, managed, and stored for easier access by departments and users across an enterprise.

Records provide evidence of the organization, functions, policies, decisions, procedures, operations or other activities of a government agency or corporation or because of the informational value of the data in them. Not all documents are records and records can be both structured and unstructured. Records can be documents but have a more rigorous process associated with managing them. Records can include books, papers, maps, photographs, machine-readable materials, or other documentary materials. They can be created or received in connection with the transaction of public or private business.

Both document management and records management systems have evolved to now support many different types of documents and information. Nevertheless, the reasons for implementing DM systems can be very different from the reasons RM systems are implemented. The value proposition with respect to DM systems is in the sharing of knowledge and collaboration capabilities that can be enhanced by having a document repository in place. Although these capabilities can be part of an RM system as well, RM is more focused on maintaining a repository of evidence that can be used to document events related to statutory, regulatory, fiscal, operational, or historic activities within an organization. While DM repositories are generally focused on keeping as much as possible for future reference, RM repositories are generally focused on keeping only what is necessary for a specified length of time. An RM system usually deploys a role-based user security model with strict filling permissions for groups of users.



Organizations should have a unique understanding of what needs to be kept as a record, for how long and what needs to be destroyed. This understanding is defined in a file plan. The file plan or what is sometimes referred to as a record plan, groups records on the same subject and allocates record numbers to ensure that related records are either shelved together (or in electronic systems filed together) and automatically assigned a retention schedule. This usually necessitates the development of a thesaurus or taxonomy to categorize records and/or documents in a common and/or standard way.

A well-managed records repository can provide a single point of access to records previously controlled by functional areas or specific individuals and permits access to records throughout their life cycle. Records management systems use automated processes to manage any record regardless of format: paper, electronic, microfilm, etc. The focus of electronic record keeping systems is to preserve the content of electronic records and their context and structure, over time, i.e., a final record should be auditable and locked in its final form. This is somewhat different from generalized electronic document repositories that provide for the checking-in and out of documents that can be revised and unlocked for future revision.

Integration of RM and DM is Becoming a Reality

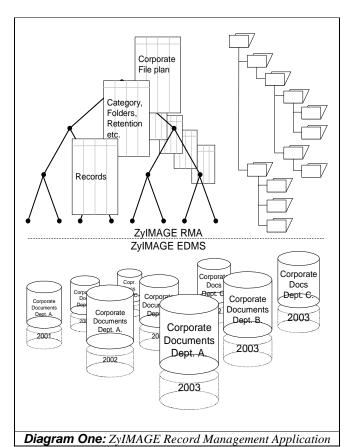
In 1999 *Gartner* predicted that revenue related to records management functionality would grow from \$15 million in 1999 to about \$35 million in 2001, much of this growth fueled by government initiatives. At that time Gartner also predicted that by the end of the year 2000, document management vendors would generate more records management-based revenue than the remaining independent records management vendors. Their conclusion is that RM vendors would be hard pressed to compete with the document management (and now content management) vendors that offer the same capabilities and then some. That may or may not have held true in the past few years but what has happened is that the integration of DM and RM features is definitely becoming a necessity for more organizations.

Although many DM vendors are incorporating RM capabilities within their products through interfaces with different electronic record keeping products it is important to note that best practice says any electronic record keeping system should be compliant with the *DoD 5015.2* standard or equivalent. This DoD standard is focused on records that are eventually transferred to the *U.S. National Archives and Records Administration (NARA)*, such as government personnel records, manuals, standards, directives and documents that are scheduled for declassification or redacted items. The *UK Public Record Office of the National Archives* has also released functional requirements for Electronic Record Management Systems. Other countries such as Australia and Canada have also identified minimum records management standards for government applications as well. These respective standards are going beyond government confines and are being used across many different industries to set a minimum standard for how records are stored within an electronic repository.

Records are usually required to be saved and archived in their original format so that it is very important for RM systems and the DM systems they may be interfaced with to be able to open any document/record in its original format. Any DM/RM system should create and maintain an audit trail (also called use-history metadata) for all records activity and system functions; and provide access to audit trail information at the fully detailed level (e.g., each individual record access, including record identifier, time, date, and user). The system should provide summary reports of audit trail information (e.g., number of accesses) and track failed attempts of all records activity and system functions.

Diagram One, on the next page, provides an example of how **ZyLAB Technologies** can make RM and DM work together.





The illustration emphasizes the structured nature of documents in the bottom part of the picture, below the dashed line, with well-organized document repositories. For example, one document repository is created for each department and a new document repository is created each year, therefore, resulting in a two-dimensional grid of document repositories. The ZyIMAGE RMA system is implemented to enforce this structure defining:

- Exactly which department should record which documents
- What metadata should be used
- How long documents should be kept
- What kind of document identification keys should be used
- Who has access and who doesn't

The upper half of the diagram depicts the ZyIMAGE RMA

system. On the left, it shows the relational database system that supports the record functions required by RMA standards. On the right, a table of contents is shown which represents a view on all documents based on the records that are stored in the relational database. The role-based security model of the RM system determines which parts of the table of contents are visible to the user and which parts are not.

The ZylMAGE RMA system is a separate product that has been developed using the *Microsoft* .NET framework. The application is a scalable multi-tier application that is entirely web enabled. The server that is running the RMA layer may be the same server that is running the database layer but may also be run on (multiple) different servers. A group of users may be assigned to a specific RMA layer to balance the workload and increase the performance. The system is scheduled for DoD 5015.2 certification in January 2004 where it will be tested using a Microsoft SQL-server database.

Users need to be on the lookout for suppliers that are compliant with the DoD 5015.2 standard while at the same time providing an architecture for handling the long term viewing requirements associated with ever-changing electronic document types, such as being able to view, JPEG, TIFF, PDF, Microsoft Word and others.

Any DM or RM system should provide a sufficiently powerful range of search features and options. These might include: wild-card or exact-match searching, proximity or adjacency searching, relevance ranking of search results, use of stop-words, limits on maximum size of results set from a search, query by image content, or others. These systems should allow for searching on metadata, record content, or assigned subject categories (using a controlled vocabulary – thesaurus, categorization scheme, taxonomy, etc.). They should also ensure that all access privileges (permissions and restrictions) are enforced on all retrievals. ZyIMAGE provides indexing, viewing and sophisticated search and navigation support for more than 250 electronic file formats providing longevity of access to records in the repositories.



According to Gartner's Rita Knox, "As a data interchange representation, XML will be long-lived, ensuring longer-term usability for the RM applications that use it.¹" Using XML databases versus flat files or relational models is one way that ZyLAB has designed its products for the future. But just using XML is not enough to ensure optimum performance on large repositories of information. ZyLAB uses its ZyINDEX full-text indexing engine to index every piece of information in the XML repository. This activity combined with the use of its unique fuzzy search engine provides not only optimum performance versus traditional database searching methods, which require that specific fields be indexed and identified at the beginning of an investigation, but also provides for the flexibility of adding new information and having it indexed and searchable as the investigation grows.

With ZyLAB's ZyIMAGE RMA users get:

- A single point of access, through any computer, of relevant and required records, including scanned and imaged paper files, electronic documents and e-mails.
- High efficiency during a record search or deposition process using advanced searching techniques and optional web tools.
- Improved auditability and activity logging. This provides clients and constituents with proof
 that the record retention has been compliant with file plans and procedures.
- Improved responsiveness to citizens, constituents and clients, therefore, saving time and reducing expenses.
- Compliance with the U.S. DoD 5015.2-STD for Records Management Applications ensuring that all relevant metadata elements are being captured.

^{1.} Knox, Rita, *Gartner Research Note*, "Records Management Needs Metadata and XML," March 14, 2003

^{2.} Complete certification planned for January, 2004



About ZyLAB Technologies

Founded in 1983, ZyLAB is the leading provider of document imaging and paper filing software that helps Global 2000 companies and governments digitally file and manage millions of pages of paper and electronic documents.

ZyLAB's comprehensive investigative capabilities, with its high quality search and retrieval features supporting over 200 languages, giving users the ability to organize and easily share all information online, makes ZyLAB software the preferred solution for intelligence agencies, law-enforcement organizations, prosecutors, law firms, courts, in-house legal departments.

With over 7,000 installations worldwide and over 300,000 users including *Amtrak, FBI, CIA, the INS (BICE Dep of Homeland Security), the New York Stock Exchange, Pepsico, Riggs Bank, the State of New York,* and *Walt Disney*, ZyLAB has a wide breadth of experience and knowledge across a variety of different industries and business applications. The company has offices located in McLean, Virginia in the U.S., the U.K., Germany, Spain, France, the Netherlands, Singapore and Australia to provide global service to its client base.

For more information you can access www.zylab.com

About e-Nterprise Advisors

e-Nterprise Advisors provides market research, strategic planning and advisory services in the dynamic area of Enterprise Content Management (ECM) to both vendor and user organizations. Technology and market areas covered include Records Management, Electronic Document Management, Content Management, Knowledge Management, Electronic Imaging, Business Process Management and Search and Retrieval Technologies.

Priscilla Emery is President and founder of e-Nterprise Advisors. e-Nterprise Advisors provides market research, strategic planning and advisory services in Enterprise Content Management to both vendor and user organizations. Prior to establishing e-Nterprise Advisors, she was Senior VP of Information Products and Services for AIIM International where she was responsible for the development and delivery of publications and other information-oriented products and services to AIIM members and associates. Prior to her position at AIIM, Ms. Emery was VP and Director of Gartner's Electronic Workplace Technologies research center and New Science's Intelligent Document Management service. She has provided many Fortune 500 user and vendor organizations with strategic planning advice in the areas of document management and the assimilation of new and emerging technologies. Ms. Emery has also worked at Blue Cross & Blue Shield of Connecticut (now Anthem), Combustion Engineering (now ABB), Primerica Corp. (now Citicorp) and Bell Telephone Laboratories.

Ms. Emery has over 25 years experience in the information systems industry, has been a featured speaker at international industry events, has been quoted in business and industry publications such as The Wall Street Journal, The Washington Post, Computerworld, InformationWeek, Software Magazine and PCWeek, and has written numerous articles for publications, such as Imaging and Document Solutions, e-doc, KMWorld, and DB2 Magazine. She has also written Knowledge Management: The Essentials, an AllM International publication, and E-Mail Management Tools: Sorting Through the Options. She has a B.A. in Mathematics from Lehman College (part of the City University of New York) and is listed in the 16th edition of Who's Who of American Women and the third edition of Who's Who of Emerging Leaders. Ms. Emery is an Advisory Board Member of the Electronic Document Systems Foundation and was also listed as one of the top 50 influencers of the document management industry in KMWorld magazine. She has recently been named conference chair for the 2004 AllM Conference Program committee and one of the 20 Leaders to See in 2003 by CMSWatch. Ms Emery also holds the Masters of Information Technology and Laureate of Information Technology for Electronic Imaging designations from AllM International and is a member of both ARMA International and Xplor International.

