

EMC Centera, EMC Documentum Records Manager, and the Electronic Freedom of Information Act

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TABLE OF CONTENTS

Executive Summary	3
Overview of the Electronic Freedom of Information Act	4
<i>Basic FOIA Requirements</i>	5
<i>Organization of Records</i>	6
<i>Business Concerns</i>	8
<i>Technical Challenges</i>	9
Benefits of an EMC Solution	10
<i>Working with Files</i>	11
<i>Scaling and Architecture</i>	12
BearingPoint Assessment and Analysis	13
Authors	14

Executive Summary

Freedom of Information Act (FOIA) personnel are confronted by the increasing complexity and volume of requests for records. In the federal government, these challenges are exacerbated because the technology needed to support effective FOIA programs has not been deployed.

FOIA programs require technology to enable efficient processing of requests, maintenance of electronic reading rooms, and assurance of accurate and quality responses. FOIA programs rely on an effective agency records management system that provides coherent means to capture, store, archive, search, and retrieve electronic files. Without this foundation, the risk is great that a FOIA response will miss essential information. This situation results in less than full-quality service and provides opportunity for embarrassment and litigation.

Federal government agencies are facing a number of significant FOIA and records management challenges—lack of statutory definition of records, guidance developed through case law, shortage of trained resources, and absence of adequate software solutions—all of which hamper agency attempts to achieve compliance with the EFOIA statute.

The EMC[®] Centera[™] Governance Edition and EMC Documentum[®] Records Manager provide an effective solution for FOIA and records management. This solution is an integrated software/hardware magnetic-disk-based archival storage system specifically designed to overcome the limitations of conventional archiving technology, while helping facilitate compliance with current federal government standards. It offers performance, functionality, and cost efficiencies that may not be available in alternative solutions.

Overview of the Electronic Freedom of Information Act

Enacted in 1966, the Freedom of Information Act (FOIA) established the public right to access information of the executive branch of the federal government. Thirty years later, Congress enacted the Electronic Freedom of Information Act (EFOIA) Amendments of 1996, requiring government agencies to make available in electronic format to the public documents created on or after November 1, 1996. This major amendment extended the Act to include electronic access to information and retention of information in electronic form.¹

The EFOIA Act applies to any executive department, military department, government corporation, government controlled corporation, or other establishment in the executive branch of the government (including the Executive Office of the President), or any independent regulatory agency².

The ubiquitous use of computer systems within the federal government creates challenges for compliance with FOIA. Agencies must be able to find information located in a variety of systems and in multiple formats. The enormous volume of electronic files increases the difficulty of providing full disclosure. Conversely, lack of controls on electronic files increases the probability of inappropriate disclosure. These challenges create risk in providing the right information within the mandated timelines. These challenges make it apparent that compliance with FOIA requires that electronic information be organized, searchable, and useful to those entrusted to manage a FOIA program. FOIA compliance parallels the need for compliance with formal records management.



“Federal records must be managed to ensure that the information that they contain is available when needed. According to the National Archives & Records Administration (NARA), without effective records management, the records needed to document citizens’ rights, actions for which federal officials are responsible, and the historical experience of the nation will be at risk of loss, deterioration, or destruction.”³

¹ 5 U.S.C. § 552, As Amended By Public Law No. 104-231, 110 Stat. 3048

² 5 U.S.C. § 552(f)

³ Electronic Records: Management and Preservation Pose Challenges, GAO-03-0936T, July 8, 2003

Effective FOIA Programs Rely on Effective Records Management Programs



A major factor in how efficiently agencies can meet EFOIA requests depends on the deployment and use of an electronic records management application. Several key events in recent years have led to developing standardized technology solutions for records management within the federal government.

In the mid-1990s, the Office of the Secretary of Defense observed the need for software solutions to manage electronic records in compliance with executive orders and guidance from NARA. In 1997 the first version of Department of Defense (DoD) Standard 5015.2, Design Criteria Standard for Electronic Records Management Software Application, was released. This standard establishes the functional requirements for records management application (RMA) software. NARA recommends that all federal agencies accept the DoD 5015.2 as the standard for choosing an RMA. As a result, the DoD standard has become the *de facto* certification criteria for commercial records management software in the federal government and for commercial organizations.

The EMC Centera Governance Edition with EMC Documentum Records Manager is one such certified solution. When used together, they offer a unique solution that facilitates compliance with federal government standards and overcomes limitations of conventional archives such as wasted storage space and vulnerable access to stored content, while helping facilitate compliance with current federal government standards. This solution offers performance, functionality, and cost efficiencies that may not be available in alternative records archiving solutions.

Basic FOIA Requirements

As noted above, EFOIA requires government agencies to make documents created on or after November 1, 1996, available electronically to the public. EFOIA also established

the requirement for electronic reading rooms. Reading rooms are collections of documents that have been made available to the public through FOIA, including indices of commonly requested documents.

EFOIA requires that records described in the EFOIA Amendment, 5 U.S.C. 552, need to be made available in electronic format.

A record is to “include any information that would be an agency record subject to the requirements of this section when maintained by an agency in any format, including an electronic format.”⁴

There are several issues that arise from EFOIA that create significant challenges for compliance.

- “...an agency shall provide the record in any form or format requested by the person if the record is readily producible by the agency in that form or format. Each agency shall make reasonable efforts to maintain its records in forms or formats that are reproducible for purposes of this section.”⁵ By keeping documents in electronic formats agencies can use software to convert documents into the requested formats.
- An agency must also make a reasonable effort to search for the records in electronic form or format. Using the EMC Documentum Records Manager search engine will enable agencies to find any and all electronic records stored in the EMC Centra Governance Edition *and* physical records stored in boxes or warehouses within a single, accurate, search.



“It’s not our intent to hide content, but there was an exceedingly high risk that we might miss critical information because someone had stashed it in a file drawer no one knew about...It was highly unlikely that a search would turn up each and every piece of information within a reasonable time period, and yet we face penalties otherwise.”

Kathleen Paul, IT Business Manager, Port of Portland

Organization of Records

The relationship of EFOIA and records management is clear: Compliance with electronic records management guidance provides the structure for a successful FOIA program.

A brief examination of electronic records management in government shows the fundamental issue that must be solved to enable an effective FOIA program:

Processes and systems must be in place so that records are captured and retained in a fashion that allows them to be inventoried, searched and retained in compliance with statutory mandates.

Government agencies use electronic systems to create records as a product of carrying out their public missions. In carrying out their missions, government employees

⁴ 5 USC 552 Section (f) Paragraph (2)

⁵ 5 USC 552 Section (a) Paragraph (3) Subparagraph (B)

increasingly rely on electronic mail for correspondence and collaboration. E-mail often contains information that makes the communication a “record” of that agency. These communications must be maintained as records under content-appropriate retention policies. It is the **topic** of the e-mail that is used to determine the record classification. To be perfectly clear, e-mail is **not** a record type of its own any more than a Microsoft Word format document is a record type. Hence, e-mail and other documents on the same **topic** would be governed by the same classification or retention policies.



In 2001 NARA, in conjunction with SRA International, Inc., completed an assessment of governmental records management practices. This study found that while many agencies are creating and managing their records appropriately, most electronic records remain unscheduled for disposition.⁶

NARA describes disposition as follows:

“Disposition refers to actions taken with regard to Federal records that are no longer needed for current government business as determined by their appraisal pursuant to legislation, regulation, or administrative procedure. Disposition is a comprehensive term that includes both destruction and transfer of federal records to the National Archives of the United States. For more detailed discussions of disposition and disposition programs, refer to 36 CFR Part 1228, Subpart D - Implementing Schedules or the Disposition of Federal Records Handbook.”

Disposition is established as part of the process known as “scheduling.” Scheduling includes the following:

- Identifying an item as a record, temporary or permanent
- Classifying it into a logical scheme or file plan
- Assigning retention periods

These three tasks can often be performed as a single step, since the identification can be accomplished by classifying the document and the retention policy can be embedded within the classification.

Scheduling includes assigning each record a retention period as prescribed by the agency’s retention schedule. The retention period, usually measured in increments of time (20 years) or related to an event (when project XWZ is completed), serves as the means for managing the life of the record. For example, the retention date can trigger the records management software to alert an authorized person to review the record and

⁶ Information Management: Challenges in Managing and Preserving Electronic Records, GAO-02-586, June 2002

approve its disposition. Records of historical significance are susceptible to improper destruction when not assigned retention dates and not sent to NARA as required.

By using EMC Centera content-addressed storage, agencies can be assured that records will not be destroyed prematurely.

A major barrier to the effective retention of federal records is the low priority and budget given to records management programs. The General Accounting Office (GAO), in a report about managing electronic records, stated, “Records management programs were generally afforded low priority by federal agencies. A related issue was that agency management had not given priority to acquiring the more sophisticated and expensive information technology required to manage records in an electronic environment”⁷ In the same report, the GAO said that, “Federal records must be managed to ensure that the information that they contain is available when needed. According to NARA, without effective records management, the records needed to document citizens’ rights, actions for which federal officials are responsible, and the historical experience of the nation will be at risk of loss, deterioration, or destruction.”

Consistent, systematic, and organization-wide retention capabilities are of critical importance to all organizations that require effective management of information, especially those organizations such as federal agencies, that are required to comply with EFOIA.

Business Concerns

EFOIA compliance has been hampered by a number of business practices within the federal government:

Number of systems where records exist. The 2001 NARA assessment found that the four agencies reviewed in the study use approximately 907 systems that they considered mission critical to their activities. The lack of inventories and scheduling of records means NARA and associated agencies have not examined the content in the information systems.⁸

Backlog in answering requests: According to the Department of Justice, in fiscal year 2003, federal departments and agencies received 3,266,394 Freedom of Information Act/Privacy Act access requests. This is an increase of nearly 36 percent over FY 2002, and it is the greatest one-year increase in requests.

⁷ Electronic Records: Management and Preservation Pose Challenges, GAO-03-0936T, July 8, 2003

⁸ Information Management: Challenges in Managing and Preserving Electronic Records, GAO-02-586, June 2002.

The number of backlogged requests is substantial and continues to grow government-wide. In a 2002 report, the GAO stated that although there were improvements to the access of online documents, not all required material was available in the reading room websites that should have been available. “In addition, materials were sometimes difficult to find, and website links were not always functioning properly. This situation appears to reflect a lack of adequate attention and continuing review by agency officials to ensure that these materials are available.”⁹ In 2002, a review of reading room websites found that agencies that had been reviewed two years earlier were backsliding in their EFOIA efforts: Specifically:

- Four agencies had up to two of the required elements available on their websites during a 2000 review, but these were no longer available in 2002.
- Eight agencies had one or two publicly available elements on their websites during a 2000 review, but no longer had them available.
- One agency did have a FOIA link on the agency home page in 2000, but not in 2002.
- After the release of the 2002 review, many agencies reported the resolution of the problems.

Cost: The cost to handle EFOIA requests is increasing greatly. In fiscal year 2003, the total cost of FOIA-related activities for all federal departments and agencies increased 7.7 percent to \$323 million. The Act allows agencies to collect fees from requestors of FOIA services. Fee collection was only 2 percent of costs at \$6.7 million. It does not appear that the number of backlogged requests is decreasing.¹⁰

Technical Challenges

Some agencies have reported the absence of commercial software solutions that meet specific FOIA and EFOIA requirements. These agencies identified the following key functional requirements for an EFOIA solution:

- Unified searching for text and metadata
- Electronic redaction
- A tracking tool to help manage information about the requests
- A reporting tool to compile information from the tracking tool
- Document management system to maintain agency records electronically
- An integrated records management and archiving system

The absence of commercially available software products purpose-built to manage EFOIA is understandable due to relatively small market for EFOIA. Companies such as EMC, however, offer a robust and proven solution to address the problem.

⁹ Information Management: Update on Implementation of the 1996 Electronic Freedom of Information Act Amendments, GAO-02-493, August 2002

¹⁰ Summary of Annual FOIA Reports for Fiscal Year 2003, www.usdoj.gov/oip/foiapost/2004foiapost22.htm

EMC provides a one-vendor, totally integrated solution for EFOIA.

Benefits of an EMC Solution

The EMC Centera Governance Edition content-addressed storage system can meet agency compliance requirements with secure, cost-effective technologies for regulated records and EFOIA support. Centera Governance Edition is purpose-built to help solve regulatory and IT challenges, while addressing the need for long-term records management. Designed in consultation with industry experts, practitioners, and regulators, Centera Governance Edition provides the advanced retention and disposition functionality that compliance applications demand. Leveraging the strengths of the Centera core platform, Centera Governance Edition delivers functionality not available in tape, optical, or traditional disk solutions—at a lower total cost of ownership. Centera Governance Edition provides the following essential features:

Fast, online access. Provides access to all records—from fax images to decision documents and more, using Centera’s online, magnetic disk-based architecture.

Assured content authenticity. The content storage mechanisms **assure** authenticity for all records—throughout their lifecycle—with Centera’s automated system of continuous data integrity checking.

Retention protection. Centera Governance Edition safeguards retention schedules at the storage media level, in accordance with mandated regulations or internal agency policy—providing retention protection intrinsic to the storage media.

Enhanced disposition. Upon expiration, records can be deleted and destroyed beyond recoverability, meeting federal standards. Vacated capacity is automatically recaptured and immediately recognized by Centera.

Record-level management. Each record stored on a Centera Governance Edition solution is retained, protected, and disposed of according to its own individual policy, so both compliant and non-compliant data can be stored on the same system.

Future-proof architecture. Content stored within Centera is location- and hardware-independent. Even as technologies evolve, records will continue to remain accessible— independent of the underlying storage medium.

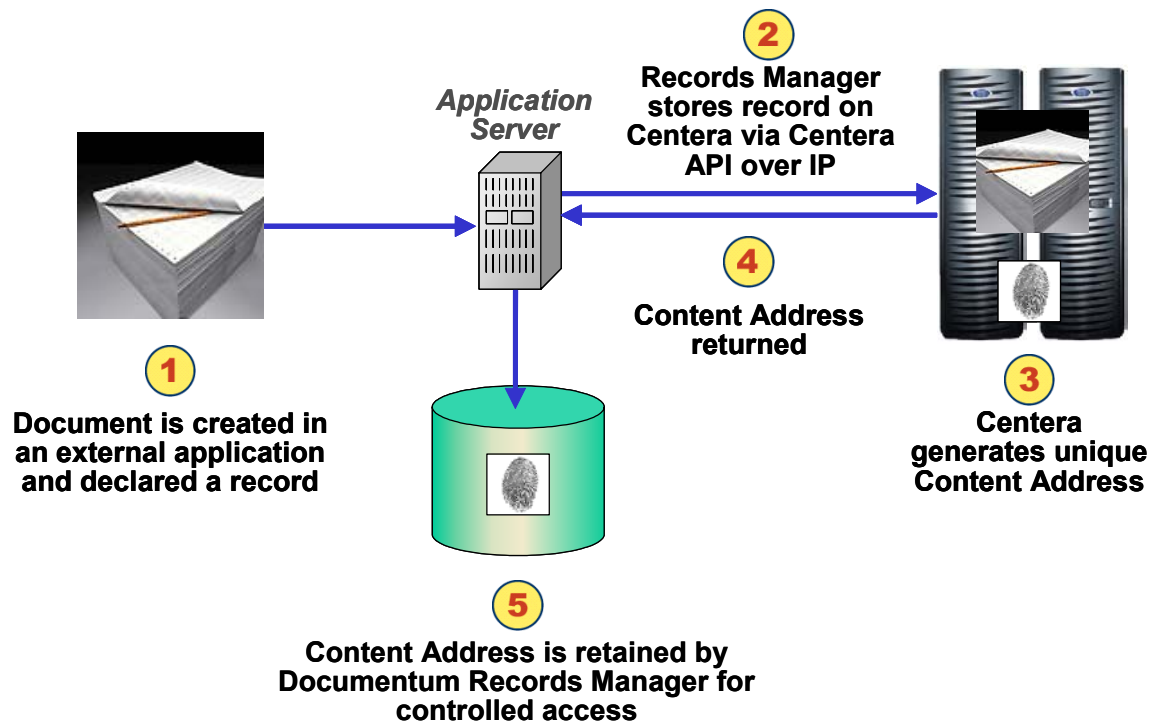
Integration. Centera has been DoD 5015.2-certified in conjunction with EMC Documentum Records Manager bringing together the records management tools from EMC Documentum and the enhanced enforcement and functionality described above from EMC Centera Governance Edition.

EMC Documentum Records Manager

EMC Documentum Records Manager provides comprehensive records management functionality across electronic documents, paper files and e-mail messages. Records Manager provides a Web-based user interface, content management integration, and embedded controls within current Microsoft Office applications. EMC Documentum Records Manager can control recordkeeping functions across the entire lifecycle of a record, including the storage on and destruction from EMC Centera Governance Edition.

Working with Files

The Records Manager application controls retention periods according to the agency file plan and can store files on the Centera storage platform. Files can be declared as records from within the content management client or directly within the original authoring application such as Microsoft Word, PowerPoint, or Outlook. The Centera system “tags” content objects with content-address information that provides the data needed to enforce retention rules and to allow the content objects to be retrieved. The graphic uses a “fingerprint” metaphor to show that the content-address information is retained in the EMC content management platform while the file and data are locked down in Centera.



Centera uses the content address to store and retrieve the content object rather than the object’s filename and physical location; this improves the security of the stored content because files cannot be located via human-readable information. Centera also accepts

storage of Web pages, which are records in some agencies. Centera can be configured to capture the static Web page and any subsequent iteration of that page.

Scaling and Architecture

Centera is highly scalable and can handle petabytes of data. The hardware component uses redundant arrays of independent nodes (RAIN) to eliminate risks inherent with other choices such as redundant array of independent disks (RAID).

The architecture is easily deployed into agency architectures as it is fully J2EE compliant and meets the strictest security standards.

The unified EMC solution provides great value. All of the components are certified together—forming a composite package. This reduces set-up and maintenance costs while assuring the ability to operate as advertised. EMC is an industry leader in providing integrated content management systems to large organizations, including multiple governmental agencies.

BearingPoint Assessment and Analysis

The EMC platform appears to provide a unified, cost-effective solution for EFOIA and records management. EMC offers a secure, industry-leading storage solution in Centera and a fully integrated suite of products for content and records management. The products also offer the distinct advantage of allowing searches into existing repositories. EMC Documentum Records Manager and EMC Centera provide a strong foundation for a compliant EFOIA system. Together, EMC Documentum Records Manager and Centera are pair certified as DoD5015.2 compliant.

With the amount of electronic and paper records increasing, it is appropriate to have a system that provides functionality for EFOIA and records management. These products provide capabilities that can help agencies to lower their costs and still meet the demand of EFOIA requests. For example, the ability to have an online record of information related to the location of non-electronic documents would contribute to faster retrieval of paper documents, thereby allowing agencies to complete FOIA requests faster.

The EMC Documentum Records Manager and Centera platform is a one-vendor integrated solution, with Centera providing critical storage, retrieval, and retention period enforcement functionality and Records Manager providing the records management functions. The EMC Centera works with Records Manager to lock down the fingerprint of records. Once a record has reached its retention period end of life, Centera removes the lock allowing Records Manager to perform the DoD-compliant disposition of writing over the document seven times to ensure it will not be retrieved.

The EMC Documentum Records Manager and Centera solution provide the functionality required by federal agencies to meet the technical challenges of an effective EFOIA program.

BearingPoint has relied exclusively upon information supplied by EMC regarding the functionality and operation of Centera and EMC Documentum Record Manager. This information was made available in the form of written explanations, marketing materials, technical specifications, and from meetings and oral presentations.

Authors

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Terry Anderson is a Senior Manager in the Digital Content Management practice within the Cross Industry Solutions Group of BearingPoint. He has hands-on experience with FOIA and formal records management, having served as a custodian for federal records and having release approval responsibility for FOIA requests. He has implemented software systems compliant with Federal records management requirements. Mr. Anderson has managed numerous engagements that delivered EMC Documentum solutions to business problems.