



Understanding and Automating NARA Compliance

Efficient Archiving Through Adlib Solutions In
The Transition To Digital Government

WHITE PAPER



CONTENTS

- Automated Document Archiving to Comply with NARA Mandates 3
- NARA Fundamentals 4
 - Regulatory Framework..... 4
 - United States Code 4
 - NARA Regulations 4
- Title 36, Part 1220, Subchapter B..... 5
 - Timetable for the Transition to Electronic Record Keeping..... 5
- Compliance with NARA Regulations for PDF Transfers..... 6
- Recommended/Mandated Use of PDF Standards Globally 7
- Recommended for Long-Term Archiving: PDF/A 8
- Automating Workflow to Enhance Compliance 9
- Keeping Pace with Government Initiatives and Goals 10
- Case Study:
U.S. Department of State..... 10
- Summary 11
- Reference Links 12



AUTOMATED DOCUMENT ARCHIVING TO COMPLY WITH NARA MANDATES

The worldwide transition to digital government offers the promise of better efficiency, accessibility, and transparency of everyday government processes, but it also creates unique challenges. Government mandates with strict timetables being issued in numerous countries place a heavy burden on agencies and businesses required to institute electronics record management systems and provide archival copies of all vital documents and communications. Most organizations these days rely on a heterogeneous mix of operating systems and applications running on complex internal network infrastructures that are sometimes supplemented with external processing and storage resources in the cloud. Capturing, organizing, and delivering archival materials from these diverse sources creates a substantial challenge—difficult to meet without a system-level solution adequate to the task.

Failure to follow guidelines and comply with mandates can result in penalties, fines, and, in some cases, imprisonment, so CTOs, CIOs, Information Management (IM), and IT professionals overseeing record-keeping systems bear the responsibilities to ensure compliance is not only an integral part of the organization's workflow, but that it can operate within the regulatory boundaries as defined by legislation.

Different regions globally are developing initiatives and enacting legislation to drive the transition to digital government forward. For example, in the United States, the National Archive and Records Administration (NARA) defines and implements the regulatory framework to which participating Federal agencies and other organizations must conform. An equivalent organization in Canada, the Library and Archives of Canada Act (LAC), stipulates the information management requirements that must be followed and the acceptable archival standards to which organizations must adhere.

Jurisdictions in Europe, South America, and other regions have also issued mandatory rules for the long-term archiving of documents. One increasingly common element of record-keeping requirements is the use of PDF/A as the recommended, accepted, or mandated archival format. Originally introduced by Adobe, the PDF/A file format was formalized by the International Organization for Standardization (ISO) and is now managed by ISO as well. PDF/A has won favor in many circles because of the page fidelity of the archival content, which meets a number of requirements for government applications where accuracy and precision of captured content is paramount.

“During the last year of development, one of the things we have been most focused on has been refining an online public interface that would work really well for researchers. As we refine that interface, we are going to start pushing out more and more electronic records from the Electronic Records Archive

(ERA). Between now and the end of 2012, every Federal agency is going to start using ERA to send their records to the National Archives. This is not an optional task for us. It is absolutely essential to the National Archives to fulfill its function here in the 21st century and going forward.”
— *Meg Phillips, National Archives*

Because the timetables for achieving compliance in many jurisdictions are so short, solutions that can be retrofitted to existing business systems and the current organizational infrastructure offer significant benefits. Design, planning, and deployment considerations can be handled more easily with end-to-end solutions that have already been proven in the field. The value of automation in meeting compliance goals is discussed later in this paper. This paper also examines the intent, scope, and requirements associated with government archiving regulations and discusses the ways in which Adlib solutions automate archiving processes at a system level to provide efficient, timely, accurate, and compliant archival materials to requesting agencies.

NARA FUNDAMENTALS

The National Archive and Records Administration (NARA) oversees the collection and storage of business, legal, and historical documents—in perpetuity. By law, federal agencies must adhere to a number of regulations that address the kinds of information that must be archived, the principles guiding information collection and storage, the manner in which the information is stored, and the requirements for submitting the information for archiving.

Documents collected and archived by NARA can include daily email communications, memoranda, agency reports, financial documents, and many other types of information. A recent directive—the Managing Government Records Directive—establishes a timetable and requirements for transitioning all Federal agencies to electronic recordkeeping. As a part of this directive, NARA is working with other agencies—including the Office of Management and Budget (OMB) and the Office of Personnel Management (OPM)—to adapt NARA processes to a digital records management framework and to assist all agencies in meeting the compliance requirements and adapting to the records management guidelines. As this transition takes place, Adlib is incorporating the necessary changes into its software solutions to accommodate the electronic recordkeeping mandate and provide a server-based automated approach to the challenge.

REGULATORY FRAMEWORK

NARA's authority stems from a number of federal laws that affect the storage and dissemination of information, including:

- The Federal Records Act
- The Freedom of Information Act
- The Presidential Records Act
- The Federal Register Act
- The Open Government Act

As can be easily inferred from the breadth and scope of these laws, NARA encompasses a wide range of government information. A smaller subset of the laws materially affect electronic recordkeeping requirement, which is the focus of Adlib's interest in recognizing compliance issues and satisfying the requirements with server-based solutions.

UNITED STATES CODE

The law of the land, United States Code, includes 51 titles, as codified and published by the Office of the Law Revision Counsel of the U.S. House of Representatives. Of these, 25 have been enacted as statutory law, including some with provisions that affect record collection and storage. The particularly relevant NARA statutes include:

- [44 U.S.C. Chapter 21](#): NARA
- [44 U.S.C. Chapter 29](#): Records Management by the Archivist of the United States and by the Administrator of General Services
- [44 U.S.C. Chapter 31](#): Records Management by Federal Agencies

NARA REGULATIONS

The statutes enacted by Congress, the basis of our Federal laws, typically do not include all of the details explaining how individuals, organizations, and businesses should follow the laws. Properly authorized Federal agencies, including NARA, then create the regulations to ensure the laws will be followed explicitly. These mandatory requirements form the framework for determining legalities, the appropriate way to meet requirements, how to use the programs available through the agency, timetables that apply, and related information.

NARA Regulations on the e-CFR



Figure 1. Digital recordkeeping provisions of NARA

From the perspective of electronic recordkeeping, the pertinent NARA regulations are provided in the Code of Federal Regulations (CFR). An online version of CFR, the electronic-CFR, contains information that is unofficial, but prepared in partnership with the Office of the Federal Register to offer open, accessible regulatory details in a searchable format.

The NARA regulations most applicable to electronic recordkeeping appear in 36 CFR, Chapter XII, Title 36 – PARKS, FORESTS, AND PUBLIC PROPERTY.

TITLE 36, PART 1220, SUBCHAPTER B

Subchapter B of Part 1220 of Title 36 of the e-CFR outlines the recordkeeping responsibilities of each Federal agency, although it does not stipulate the precise means by which the recordkeeping must be performed—only the principles that must be followed when implementing recordkeeping processes.

To help agencies implement mandates, NARA periodically issues guidelines that detail requirements for record collection and storage. For example, in regards to PDFs, in 2003 NARA released a set of guidelines specifying acceptable formats for transferring PDFs to NARA. The official “Transfer Instructions for Permanent Electronic Records” covered details such as:

- Security settings for the PDFs
- Font inclusion
- Record conversions from office automation software
- Scanned image formats
- Optical character recognition considerations
- File compression
- Approved media

Further, toolkits, handbooks, resources, and guidance for those tasked with managing electronic information systems and submitting electronic records to NARA are also available. For example, the [Toolkit for Managing Electronic Records](#) features a number of tools developed by NARA and other organizations to guide creation and transfer of records. The detailed PDF guidelines, Toolkit, and many other reference documents are included in Adlib’s [“NARA Educational Pack”](#).

Mastering and adhering to the NARA mandates is not a trivial exercise. In order to simplify compliance for customers and clients, Adlib’s server-based solutions automatically generate compliant PDFs for archival transfer – this solution incorporates the guidelines stipulated by NARA.

TIMETABLE FOR THE TRANSITION TO ELECTRONIC RECORD KEEPING

On August 24, 2012, President Barack Obama issued a memorandum to the heads of executive departments and agencies and independent agencies. Titled the “Managing



NARA requires NA Form 13171B (9-10) to capture details of submitted PDFs

Government Records Directive”, the memorandum lays down the framework to hasten the transition to electronic recordkeeping as part of the Digital Government Strategy.

Among the targets established in the directive:

- By 2019, Federal agencies will manage all permanent electronic records in an electronic format
- By 2016, Federal agencies will manage both permanent and temporary email records in an accessible electronic format

To accomplish these goals, the directive goes on to designate a Senior Agency Official (SAO) to oversee the records management program by November 15th, 2012. This individual will be responsible for coordinating with the NARA Agency Records Officer to ensure compliance with regulatory mandates. Additional paragraphs in the directive outline training requirements, record scheduling requirements, automation techniques, and other aspects of a sound, compliant records management system. To facilitate the transition, NARA is updating the current Request for Records Disposition Authority Process with a target of releasing new criteria by December 31, 2015.

This directive clearly establishes a strong incentive for agencies and other organizations that fall under the mandates to complete the transition to electronic record keeping promptly. Software and archiving solutions that can be integrated into existing infrastructures offer advantages in terms of meeting the timetable for agency recordkeeping compliance.

COMPLIANCE WITH NARA REGULATIONS FOR PDF TRANSFERS

As a part of certifying agency compliance with NARA transfer requirements, NARA uses a form, NA Form 13171B (9-10), to capture details of the PDF files being submitted. The form includes these questions:

- Do the PDF records comply with PDF version 1.0 through 1.4?
- Are all PDF security settings deactivated? If not, can they be deactivated for documents created after April 1st, 2004?
- Are all referenced fonts embedded within the PDF files? If not, can they be added?
- Are the PDF records created from scanned images? If so and Optical Character Recognition processing has been performed on the images, are the original images available as part of the archive?
- Do the PDF records contain embedded files, such as images, audio, word processing files, or form data? If so, will this information be captured and transferred to NARA separately from the PDFs?
- Are there finding aids and other relevant technical documentation associated with the records that can be transferred to NARA?
- Are there provisions for ensuring the integrity and continued usability of the electronic records until they are ready for transfer to NARA?

RECOMMENDED/MANDATED USE OF PDF STANDARDS GLOBALLY

Many archive file formats exist (eg. PDF, TIFF, HTML, PDF/A, etc), however not all of these are appropriate, acceptable, or even compliant. The chart below provides a global snapshot of the file format standards recommended and/or mandated for government archive programs. When preparing for

NARA submissions, organizations should consider not only the minimum current accepted standard, but also the best practices of other region in order to mitigate risk against multi-jurisdictional acceptance and evolving future standards. It is for these reasons that leading organizations are increasingly implementing PDF/A within their NARA archiving program.

ORGANIZATION	FORMAT	MANDATED, RECOMMENDED, OR ACCEPTED
U.S. National Archives and Records Administration (NARA)	PDF/A	Accepted
U.S. Food and Drug Administration	PDF	Mandated
U.S. Nuclear Regulatory Commission	PDF	Recommended
Library Archives Canada	PDF/A	Recommended
European Commission (MoReq)	PDF/A	Recommended
German Government (SAGA v4)	PDF/A	Recommended
French Government	PDF/A	Recommended
Dutch Government	PDF/A	Mandated
National Archives of Sweden	PDF/A	Accepted
Austrian National Library	PDF/A	Recommended
The National Archives of Norway	PDF/A	Recommended
Organization for the Promotion of Automated Accounting	PDF/A	Recommended
Brazilian government	PDF/A	Mandated
U.S. District Courts	PDF/A	Mandated
Victoria, Australia, Public Record Office	PDF	Mandated
Italian government archiving standard	PDF	Accepted
Taiwan National Central Library	PDF	Recommended
Switzerland government	PDF/A	Recommended
European Court of Human Rights	PDF	Accepted
Spain: Economy and Taxes Department	PDF/A	Accepted
Publication Office of European Union	PDF/A	Recommended
Library of Congress	PDF/A	Recommended
Government Record North Carolina	PDF/A	Recommended

Table 1. Sampling of agencies that use PDF/A or PDF for archiving

Some latitude exists for determination of whether the PDF is compliant and can be transferred for archival storage, based on judgments made by the archivist. Decisions on compliance take into account earlier historical documents, embedded files, scanned images, and similar criteria. But, the majority of the compliance requirements are clear

and straightforward. If PDF documents were created from scanned images of pages, additional criteria apply and an Agency Review form for scanned images of textual records must be submitted. In many cases, the PDF/A format provides the simplest way to ensure long-term archiving and compliance with NARA guidelines.

RECOMMENDED FOR LONG-TERM ARCHIVING: PDF/A

Released in 1993, free of charge, the Portable Document Format (PDF) standard originated as a proprietary file format to provide a means for effectively capturing and displaying document contents without the application from which the document was created. The PDF format gained wide acceptance and in 2008, it was published as an open standard by the International Organization for Standardization (ISO) as ISO 32000-1:2008. The PDF 1.4 specification was adapted by the ISO Technical committee 171 to better suit the needs of long-term preservation of documents. From their work, PDF/A was released in 2005 and has evolved through a series of ISO 19005 standards. The widespread acceptance of PDF/A for long-term document archiving is strengthened by the ISO management of the standard and the comprehensive, self-contained document storage characteristics of PDF/A.

As an indication of the level of adoption in different countries, Table 1 above offers a sampling of organizations that use PDF and PDF/A for archiving. As the transition to digital government continues around the world, organizations sbam Msb

used to generate them, the visual appearance and page fidelity of PDF/A content favors the requirements for archiving over long periods of time.

Adlib's robust PDF/A feature set helps lower costs when large-scale, long-term archiving is necessary to meet regulatory mandates and built-in search capabilities make information in documents more accessible. PDF/A generation can be accomplished from within ECM and SharePoint systems, streamlining workflow and processes through automation.

Adlib continues to update and advance the technology in its solutions to meet current and future regulatory mandates, including the Managing Government Records Directive of 28 NOV 11, which stipulates that all Federal agencies transition to electronic recordkeeping on a fixed timetable and that all agencies demonstrate compliance.

For more information about PDF/A, read [this Adlib whitepaper, Portable Document Format/Archive](#)





Figure 2. Adlib can automate processes and improve efficiency across the entire document lifecycle including 'Archive'

AUTOMATING WORKFLOW TO ENHANCE COMPLIANCE

Adlib-engineered server solutions deployed in government installations that fall under NARA mandates generate PDF/A content that comply with current archiving standards. Clearly, the less manual intervention required in capturing, processing, and creating archival files from office documents, email communications, and other material subject to compliance guidelines, the more efficient the overall workflow. For many agencies, requirements stipulate that a range of vital information be captured and archived from a diverse range of source applications.

For example, agencies are typically required to capture and preserve email communications from staff members. Other applications in an organization that also generate content that requires archiving could include Microsoft Office files containing financial records and legal documents; data from an ECM system (eg. OpenText, FileNet, EMC, etc.); Web pages that present policies or news items; publishing tools used to produce manuals, guides, procedures, instructional material, and so on; SharePoint files; scanned diagrams or design plans; and many other types of unstructured content.

Adlib PDF Enterprise is able to integrate with various systems and workflows, automating the production of PDF/A output. Further, to improve information access, and help meet search standards recommended by NARA, Adlib solutions can also automatically generate a table of contents for PDF documents, headers and footers, an index, consecutive page numbers, control data including time and date stamps, and status information. Figure 2 illustrates the paths that information can take when being processed for storage, archival purposes, or delivery to the Web, print, or mobile applications.

A rules engine included with Adlib solutions helps configure metadata-based document classification that fits into the workflow process and automates creation of compliant archival files for NARA or other agencies. Rules can be applied to specific departments, line-of-business processes, document merging, PDF enhancements, digital signatures, approval processes, and many other aspects of PDF creation. Through a straightforward configuration process, all content ingested by the Adlib solution can be specifically tailored to compliance requirements and delivered in a format suitable for delivery to the governing agency.

KEEPING PACE WITH GOVERNMENT INITIATIVES AND GOALS

While compliance with regulatory mandates is a driving force to establish effective archiving processes within an organization, a side benefit of taking the necessary steps towards compliance, often includes achieving a higher level of efficiency and productivity across the overall content lifecycle. Beyond helping resolve the compliance challenges presented by NARA, Adlib offers solutions that support a number of different Government Information Management Initiatives including:

- Freedom of Information Act
- Enterprise search
- eDiscovery
- Litigation support
- Case management
- Grants and contributions
- Digitization and imaging
- Procurement

By design, Adlib integrates unobtrusively into the workflow without disrupting existing systems. Adlib offers solutions that can help transform content across the entire lifecycle as outlined by [AIIM](#) content management model. Whether looking to enhance OCR and data capture, improve ECM search capabilities, or automate the publication of merged-document reports, Adlib PDF Enterprise plays a vital role in these solutions.

Case Study: U.S. Department of State

As an example of how Adlib can simplify and streamline records management for Federal agencies, a recent engagement with the U.S. State Department demonstrated the advantages of automated document conversion. Faced with massive volumes of cable-based communications, the department had been manually processing cables from over 270 embassies, consulates, and other posts worldwide.

NARA specifies file submissions in PDF/A, the requisite archiving format for Acrobat files, so the department needed a mechanism for converting the primitive black and white ASCII-based cable system to a scalable method for archiving and storing cables and also provide searchable access to content for staff members with appropriate clearances.

The solution involved more than 20 Adlib servers deployed to process up to 5,000 cables each day. Each incoming cable is automatically converted to PDF/A format and attachments associated with the cables—such as images and other rich media content—get stored in Microsoft SharePoint. The solution provided by Adlib not only satisfied the requirements of NARA, but brought tremendous efficiencies to the U.S. Department of State, enabling staff members to access and share relevant information with colleagues and other agencies in a seamless and effective manner.

View this case study at adlibsoftware.com



“I want us to ask ourselves every day, how are we using technology to make a real difference in people’s lives.”

— *President Barack Obama*

Digital Government: Building a 21st Century Platform to Better Serve the American People, May 23, 2012



SUMMARY

The worldwide rush to create the foundation and infrastructure for open, accessible, and available digital government has inspired many leaders and organizations to revamp and restructure information management processes in keeping with the philosophy “create once, publish everywhere.” Such a system must be able to contend with both structured and unstructured information, to encompass the broad range of applications, operating systems, and networking models in use, and to fit naturally into the processes typically in use within corporations, government agencies, and media outlets. The archival materials and daily communications generated by many different organizations must, by law, be delivered to governing agencies—whether NARA or another agency—in an acceptable format.

These requirements can be successfully met by Adlib server-based solution, which handles a diverse range of content types and produce consistent, compliant archival files that meet prevailing government regulations. This implementation incorporates automated processes that minimize IT and regular staff intervention and results in overall process efficiency. The ISO standard PDF/A—the format of choice for Adlib’s archiving solution—has evolved to become the leading format for long-term archiving. PDF/A provides compact, self-contained, searchable storage containers that can accommodate a versatile selection of source material.

For more information, visit adlibsoftware.com.

REFERENCE LINKS

1. http://youtu.be/oRiY_3ojjho
2. <http://www.archives.gov/records-mgmt/initiatives/pdf-records.html>
3. <http://www.fda.gov/RegulatoryInformation/Guidances/ucm124737.htm>
4. <http://www.nrc.gov/site-help/e-submittals/faqs/digital-id-qa/file-requirements.html#1>
5. <http://www.collectionscanada.gc.ca/obj/012018/f2/012018-2200-e.pdf>
6. http://ec.europa.eu/transparency/archival_policy/moreq/doc/moreq2_spec.pdf
7. http://www.cio.bund.de/SharedDocs/Publikationen/DE/Architekturen-und-Standards/SAGA/archiv_saga_1_1_englisch_download.pdf?_blob=publicationFile
8. http://www.references.modernisation.gouv.fr/sites/default/files/RGI_Version1%200_0.pdf
9. <http://www.forumstandaardisatie.nl/fileadmin/os/documenten/NEN-ISO%2019005-1%202005%20PDF%20A-1.pdf>
10. <http://www.ltu.se/centres/Centrum-for-langsiktigt-digitalt-bevarande-LDB/Bibliotek/Digitala-objekt/PDF-A-1.45217?l=en>
11. http://www.onb.ac.at/bibliothek/digitale_medien_informationen.htm
12. <http://www.arkivverket.no/eng/Public-Sector/Regulations/Transfer-of-electronic-records>
13. <http://www.gfar.org/?q=node/2>
14. http://www.governoeletronico.gov.br/acoes-e-projetos/e-ping-padres-de-interoperabilidade/anexos/E15_677e-PING_v2.0.1_05_12_06_english.pdf
15. <http://www.ord.uscourts.gov/en/faq/pdfa>
16. http://prov.vic.gov.au/wp-content/uploads/2012/01/VERS_Spec4.pdf
17. http://www.governo.it/Presidenza/DIGITALIZZAZIONE_PA/pubblicazioni/linee_guida_universita_dig_2011.pdf
18. <http://www.archives.gov.tw/english/Publish.aspx?cnid=47&p=1880>
19. <http://www.bk.admin.ch/themen/egov/03990/05809/index.html?lang=de&unterseite=yes>
20. http://www.echr.coe.int/NR/rdonlyres/A4742F7D-4019-4280-A815-80BCB2459C98/0/HUDOC_translations_Copyright_and_technical_guidelines.pdf
21. <http://www.meh.es/Documentacion/Publico/SGT/e-administracion.pdf>
22. http://publications.europa.eu/tenders/our/documents/ao_10232/ao_10232_specifications_en.doc
23. <http://www.digitalpreservation.gov/formats/fdd/fdd000318.shtml>
24. http://www.records.ncdcr.gov/guides/file_formats_in-house_preservation_20120910.pdf



Adlib is the leading expert in document-to-PDF transformation, enabling the world's largest organizations to improve the efficiency, quality and control of document-intensive business processes to optimize productivity, mitigate risk and reduce costs. Being the trusted technology provider to Global 2000 organizations, Adlib brings over a decade of expertise supporting more than 5,000 international companies and government organizations to help them reduce the financial exposure and risk of non-compliance with regulatory agencies; reduce IT costs by centralizing document transformation; and leverage document-to-PDF as a shared service across the enterprise. Adlib is a Microsoft Gold Partner, a member of the PDF/A Competence Center, and an EMC Certified Solution provider.

For more information, visit www.adlibsoftware.com.

215-3228 South Service Road, Burlington, Ontario Canada L7N 3H8 | 1.866.991.1704 | 1.905.631.2875 | +44 (0) 1454 776688 | adlibsoftware.com