
Appendix K NIRIS EDMS Ready .PDFs

Introduction

The Administrative Record Files, Post Decision Files and Site Files, whether online or on CDROM/DVD, contain files that have been created electronically, digitally or both.

To minimize the level of effort needed to make these files consistent and to ensure a quality product, these guidelines provide details on how files should be created, combined and enhanced.

NAVFAC requires that all files be created or converted to the approved NIRIS ready .PDF (Portable Document Format). PDF files can be created in two ways, either from electronic files or from digital or scanned files. These guidelines were designed to support individuals who are creating PDF files from electronic files, scanning paper documents, or adapting existing electronic files with the ultimate goal to create approved NIRIS files.

This guideline cannot anticipate all operating systems and software versions, therefore general instructions are provided.

Adobe Acrobat .PDF files with Optical Character Read (OCR) performed is the approved electronic format to which paper documents, documents in other formats and documents with incompatible electronic files must be converted.

Adobe Acrobat® is the approved software to combine components of deliverables created in multiple electronic formats (e.g. native electronic files such as MS Word®, MS Excel™, Autodesk™ AutoCAD™, or ESRI ArcView™) into a single format (Adobe Acrobat® .PDF files) organized in the same order as the original document.

Required Software

Adobe Acrobat is the most widely used program to create PDF files, however other programs have the capability to create PDF files. This Guide has been written assuming a moderate understanding of the Acrobat Program.

Acrobat Reader is used for review prior to finalizing the file. Most users will view documents in Reader. All files should be opened in Reader to ensure no error occurred.

Creating Approved NIRIS Files

Appendix K provides guidelines for the following:

- a. How to scan paper or other media for conversion to approved NIRIS files.

- b. How to adapt existing PDFs and other electronic files and convert to approved NIRIS files.
- c. How to create and publish approved NIRIS files for submission to the Navy/Marine Corps by contractors.

How to Scan Paper or Other Media for Conversion to Approved NIRIS Files

The documents should be prepared for scanning by removing all staples, paper clips, etc. The following DPI (Dots per Inch) should be used when scanning. Never scan below 200 DPI.

- Black and White: 300 DPI
- Oversize Black and White: The DPI can be lowered to reduce the file size but do not go below 200 DPI. A balance between quality of image and file size must be attained.
- Color: 200 DPI

Once the paper has been scanned the electronic images must be converted to PDF and OCR (Optical Character Read) performed on either during the conversion to PDF or after the conversion to PDF. OCR converts the images to actual text and therefore allows the file to be searched for specific words.

Once the PDF has been created with OCR, specific guidelines are provided to enhance the PDF file to make it an approved NIRIS file. See [Requirements for All Approved NIRIS PDF Files](#).

How to Adapt Existing PDFs and Other Electronic Files and Convert to Approved NIRIS Files

Other Electronic Files

The content of a PDF file must be created in a program other than Acrobat (when the document isn't scanned). Typically Microsoft Word or Excel, WordPerfect, Adobe PageMaker, etc. are used to create documents. Two methods are available for converting these files to PDF, PDF Writer or Distiller.

Use PDF Writer (available with Acrobat, but other programs can be used) for quick conversions of simple business documents to PDF. If you do not obtain satisfactory results with PDF Writer, convert the document to PDF with Distiller (available with Acrobat). Use Distiller for documents containing Encapsulated PostScript (EPS) graphics, documents containing images for which you need to choose specific resampling and compression methods or documents produced from desktop publishing applications, such as Adobe FrameMaker, Adobe PageMaker, and Quark Express.

When creating PDF files from other electronic files, make sure that all fonts are embedded. This will ensure that the PDF files look exactly like the original file and will avoid font errors when viewing. When creating PDF files from other electronic files, the text is retained is therefore OCR is not necessary. These files will be searchable.

Once the PDF has been created, specific guidelines are provided to enhance the PDF file to make it an approved NIRIS file. See [Requirements for All Approved NIRIS PDF Files](#).

Existing PDF Files

Existing PDF files must also be adapted to make them approved NIRIS files. Since PDF files can be created with OCR or without OCR, make sure that the existing PDF has OCR. If not, perform OCR on all pages that do not have OCR. Every page of the file needs to be checked. Existing PDF files are often made by a combination of scanned pages and pages converted from electronic files. Therefore, the OCR may vary from page to page. Use Acrobat to perform OCR on the required pages.

Once the PDF has been verified that OCR is performed, specific guidelines are provided to enhance the PDF file to make it an approved NIRIS file. See [Requirements for All Approved NIRIS PDF Files](#).

How to Create and Publish Approved NIRIS Files for Submission to the Navy/Marine Corps by Contractors

As discussed above, PDFs can be made either by scanning or by converting other electronic files. All documents submitted to the Navy/Marine Corps by contractors should be in approved NIRIS format. The guidelines presented in 3.1 and 3.2 above should be followed for either scanning or conversion of electronic files. Often times the PDF file is made from converting existing electronic files. Once a signature page has been signed, it should be scanned and inserted into the PDF. Oversize drawings or maps are sometimes scanned and inserted into the PDF file. Be sure to perform OCR on the scanned signature page or any inserted pages.

When PDFs are made from various files, such as MS word, Excel, Cad, etc., the files should be combined in the exact order as published. Also double check that the PDF file looks exactly like the page on the screen.

Once the PDF has been verified that OCR is performed and an exact replica of the published document, specific guidelines are provided to enhance the PDF file to make it an approved NIRIS file. See [Requirements for All Approved NIRIS PDF Files](#).

Requirements for All Approved NIRIS PDF Files

Below are general guidelines for every PDF file created for inclusion into an Administrative Record File, Post Decision File or Site file. In some instances the guidelines are self-explanatory and other instances more information is provided in subsequent sections.

Settings

Once the PDF file has been created and the file has been verified that OCR has been performed, specific properties or settings are required for approved NIRIS PDF files.

- Document Properties

Set the magnification to 'Fit in Window or Fit Page' for opening. File>Document Properties>Initial View: Magnification: Fit in Window or Fit Page.

Set the initial view to 'Page Only' when no bookmarks are present or Bookmarks and Page when bookmarks are present. File>Document Properties>Open Options: Initial view: Page Only or Bookmarks and Page.

- When necessary, rotate pages to orient the text in the normal reading fashion.
- Delete all blank pages; however, do not delete a blank page when it has a page number on it or it states "this page intentionally blank."
- Any document that has a Table of Contents and contains more than 100 pages should be bookmarked according to the Table of Contents. See [Bookmarks](#) for additional guidelines.

Managing Large PDF Files

Large Portable Document Format (PDF) files should be divided so that individual files are limited to approximately 200 MB. For large files, break them into two or more pieces that "make sense." Each section will be included as an individual document in NIRIS. For example, a 600 MB document could be split into a 150 MB piece containing the report text and subsequent sections that contain appendices or reference materials. Another example is a 600 MB document that can be divided into a 50 MB file including just the text and then subsequent files made up of whole appendices or other sections of reference materials of differing sizes that could be somewhat larger or smaller than 200 MB. As in the previous example, the non-text sections would be divide at logical breaks (e.g., not in the middle of an appendix).

The PDF file should be compressed and/or optimized and saved for a fast web view. Enabling for fast web view and compressing a PDF file will make management of the file much more efficient, and most Off-The-Shelf (OTS) PDF software, such as Adobe Acrobat Pro and Nuance Power PDF, include this functionality. If one does not have access to such software and wants to compress the file, there are several free online PDF software services available on the Internet. [Smallpdf.com](#) and [ilovepdf.com](#) are two that have been known to work well. From these sites, choose the "Compress File" option and simply drop and drag a file. Mention of specific software does not equal an endorsement by the Department of the Navy.

Document Data Sheet

The hard copy submittal of the document must also be divided in the same way as the PDF files, and a document data sheet must be filled out and accompany each hard copy section/document when submitting to NIRIS.

PDF File Naming Standards

- Use the following for a single .PDF file: N00026_000125.PDF
- Use the following for a cleaved .PDF files: N00026_000237_0001.PDF

After all of the above steps have been completed, the file should be optimized and saved for a fast web view.

Bookmarks

Any document that has a Table of Contents and contains more than 100 pages should be bookmarked according to the Table of Contents. Bookmark as follows:

- Only the main chapters or sections (first level) in the Table of Contents are bookmarked
- Chapter or Section numbers are not included in the bookmark.
- The case of bookmarks should be kept consistent i.e., all upper case or title case

Just as the opening magnification has been set to Fit in Window, the page view should be Fit in Window when the bookmark is created or the destination set. This is to maintain consistency as one navigates through the bookmarks. If the bookmark has not been created in the Fit in Window view, click on Fit in Window and then reset the destination of the bookmark.

Table of Contents

A typical Table of Contents may list the document sections and a list of the appendices, tables, figures, or acronyms and abbreviations. The chapter or section numbers are not included in the bookmark.

Because the bookmarking column is usually set as a narrow column to allow the best view of the document, it is more important to actually see the name of the chapter or section rather than Chapter 1, Section 1, etc. Prior to saving the file, the bookmarks should be collapsed.

Appendices

When the appendices of a report are extensive, individual sections (subsection cover pages) are abbreviated, bookmarked and nested within that appendix. When bookmarking is complete, the individual bookmark is collapsed.

Conclusion

Following these guidelines will help to reduce duplicate effort and ensure a quality product. Various versions of operating systems and software applications may cause some settings in these guidelines to be different from the system being used. The documents vary widely and all situations cannot be anticipated within these Guidelines.

Consult with appropriate Command representative to resolve issues not addressed.

Glossary

- **Bookmarking:** A hierarchical outline of the document that is used for navigating through the document. Each bookmark links to a page in the document.
- **Compression:** To reduce the file size of text, line art, and bitmap images to allow rapid opening and display.
- **Digital Files:** Files created by scanning or digitizing a paper document.
- **DPI (Dots per inch):** A unit of measure for resolution of scanned images.
- **Downsample:** To reduce a file size by combining pixels.
- **Electronic Files:** Files created from computer software applications such as Microsoft Word, Excel, WordPerfect, Adobe PageMaker, etc.
- **Embed Fonts:** A font substitution method that preserves the appearance of standard for when a document is converted to PDF. This ensures that the actual font will display only system regardless of whether the fonts are installed.
- **OCR (Optical Character Recognition):** The process that converts the image or picture or printed and handwritten text to text that can be searched.
- **PDF (Portable Document Format):** A globally accepted, platform independent file form that can be viewed using free Adobe Reader. Pages are viewed exactly as created, in black and white or color, and can be printed with any postscript printer.

PDF Format Information

The first few paragraphs from <http://en.wikipedia.org/wiki/PDF/A> explain the differences between PDF and PDF/A.