Best Practices for Off-line Electronic Publication
AIC Specialty Group Annuals & Postprints

AIC Publication Committee
    Michelle Derrick (ex officio, JAIC)
    Susanne Gansicke, Committee Chair
    Lisa Goldberg (ex officio, AIC Newsletter)
    Walter Henry
    Paul Messier, (Director of Communications)
    Vanessa Muros
    Richard Newman
    Allison Olson
    Ellen Pearlstein, Committee Chair, 6/04-6/05
    Glenn Wharton
    Eryl Wentworth (ex officio, AIC)

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Preamble

    Following a mandate from the Board of the American Institute for Conservation, the Publications Committee has created this second in a series of "Best Practices" documents for Specialty Group Annuals and Postprints. As with the previous *"Best Practices for Print Publications"* the purpose of this document is to outline publishing practices that will assist in the creation and dissemination of Specialty Group publications. Drawing wherever possible on published standards, this document provides guidance so that Specialty Group Publications can accurately and consistently communicate information on publication content, context, venue, level of review, copyright status, and means of obtaining additional copies.

    This document deals exclusively with "off-line" electronic publications. For the purposes of this document, an off-line publication is defined as an electronic publication that is static and delivered using removable media such as computer disc, CD-ROM or future storage formats. Off-line content is distinguished from "on-line" material that is delivered by computer networks such as the Internet which will be covered in a forthcoming Best Practices document. Publications covered by this document are essentially electronic facsimiles of conventional printed publications. As such, this document is based heavily upon the previous Best Practices for Print Publications. Those preparing off-line Specialty Group publications should first confirm that their text meets these recommendations for print publications before implementing the recommendations in this document.

    While an attempt has been made to anticipate technological change and innovation in order to "future-proof" this work, certain practical realities were taken into account. Primary among these, are the facts that the prevailing delivery medium for static electronic publications is the CD-ROM and, likewise, the most widely adopted software for the dissemination of electronic publications is Adobe's Acrobat software program. The advantages and disadvantages of Acrobat files delivered on CD-ROM will continue to be reviewed by the Publications Committee and future revisions of this document are anticipated. However, for the foreseeable future, it is the recommendation of the Publication Committee that static, off-line, Specialty Group Publications be distributed using Acrobat and that non-network delivery be accomplished using CD-ROM.

1.0 Preparing a publication for electronic publication

1.1 Text

Text portions of the publication should meet the recommendations established in Best Practices for Print Publications. As documents published under these guidelines are conceived as facsimile print publications (that can be printed in part or in full by the reader) all elements of a conventional Specialty Group print publication should be present with the exception of the inside cover and half title page which are now optional. Specifically the following elements should be included in sequence. This list also indicates whether the element is required or allowable. Refer to the Best Practices for Print Publications for additional information on these elements and for illustrations.

Elements of a print and offline electronic publication	
Front matter	
Cover	Required
Title	Required
Volume / issue	Required
Date	Required
AIC logo	Required
AIC name	Required
Subtitle	Allowable
SG logo	Allowable
SG name	Allowable
Inside Cover	Allowable
Half Title Page	Allowable
Title (if half title page is used)	Required
Title Page	Required
Title	Required
Subtitle (if present on cover)	Required
Conference name, date & place	Required
Compiler / editor name(s)	Required
Volume / issue	Required
Date	Required
AIC logo	Required
AIC name	Required
SG logo	Allowable
SG Name	Allowable
Publication information page	Required
Copyright information	Required
ISSN	Required
Level of review	Required
Statement on distribution, intended audience and purchasing information	Required
AIC address	Required
AIC www address, using fully qualified URL	Required
Table of contents	Required
Full volume citation	Required
Following elements should appear Paper Title followed by Author Name (s), page number	Required
Foreword	Allowable

Preface	Allowable
Acknowledgments	Allowable
Introduction	Allowable
Body	
First page of each article	
Article title	Required
Author	Required
Full volume citation, includes Title, volume and date	Required
Pagination starts on the first page of the first article and is continuous to the end of the volume using arabic numerals	Required
Following Page	
Pagination (see above)	Required
References	Allowable
Last Page of each article	
Capsule of publication history i.e. "Paper presented at PlaceName & date" (if applicable)	Required
Summary statement of peer review	Required
Article Title	Allowable
Author	Allowable
Full Volume Citation	Allowable
Back Matter	
Guidelines for authors	Allowable
Colophon	Allowable

1.2 Illustrations

There are two distinct options for the placement of images in each article. First is placing the images along side of text references as in conventional print publications. The advantage of this method is that the images and text are presented together so there is greater continuity for the reader. Another option is to place illustrations in sequence at the end of each article. The primary advantages of this method are that layout is vastly simpler and images can appear much larger on screen (up to a full page). Whichever method is chosen, the handling of tables, charts and photographic illustrations must be consistent for each article in the volume. If presenting images at the end of articles, a distinction can be drawn between tables and charts that can be presented integrally with the text and photographic illustrations that are presented at the end of an article. If full page illustrations are used, the source image files should be 600 dpi at minimum with the longest print dimension no less than eight inches. Source images should be saved and archived as individual files using the TIF image format.

2.0 Preparing the Acrobat files

2.1 "Print" using the Adobe PDF converter

The publication should be saved as a single document using the native file format of the original authoring program (i.e. MS Word, Adobe PageMaker, Quark Express). It is critical that the document be carefully proofed at this juncture as making editorial changes from this point forward is extremely difficult if not impossible.

Once the content and layout pass editorial review, the process of making an Acrobat file begins. The first criterion is that a current version of Adobe Acrobat (6.0 or higher) be installed on the computer. This software is distinct from the ubiquitous and free Acrobat Reader in that is used to create, not just read, Acrobat files. At present, Adobe markets two version of the Acrobat software: Standard and Professional. The instructions for the document were tested on the Standard version. While there are numerous third party programs available for preparing Acrobat compatible files, use of these programs is not recommended since compatibility and reliability can not be adequately tested.

Once Acrobat is installed, it should add a "virtual" printer to the computer. **For Mac users:** from the authoring program (i.e. MSWord), select: File/Print. Within the print dialog box, select "Adobe PDF". Then click the "Save as PDF" button at the bottom of the print dialog box. Give the file a title, without ".doc" as an extension. This process will create an Acrobat file, saved on the hard drive of the computer, and opened in Acrobat.

For PC users: frrom the authoring program (i.e. MSWord), select this printer which is usually listed as "Adobe PDF" as shown in Figure 1. In the print dialog box, click the properties button for the Adobe PDF printer.
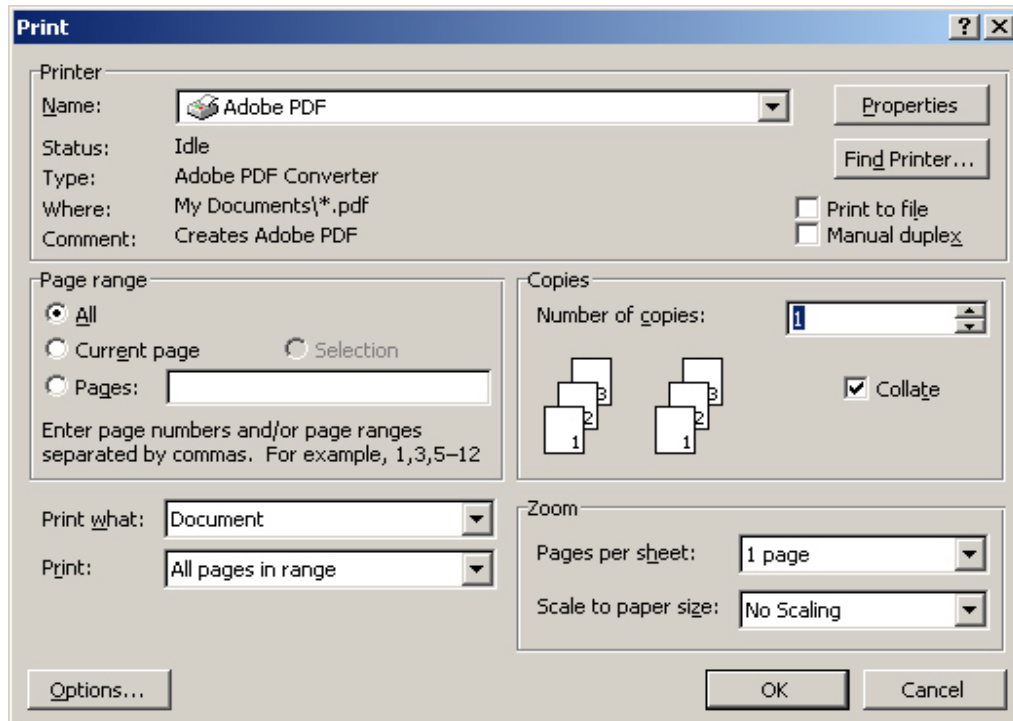

Figure 1: "Print" using the Adobe PDF document converter

The full range of Acrobat conversion settings can now be accessed though altering these setting is **not** recommended. Under the tab "Adobe PDF Settings," be sure "Page size" is set to "Letter" and the "Default Settings" is set to "Standard." "PDF" security should read "None." Accepting these settings will create documents that have the following characteristics (among others):
1. Compatibility with AA5
2. Binding = left

3. Print = 8.5 x 11
4. Images = down sampled to 150 dpi for images above 225 dpi
5. Color Compression = automatic JPEG
6. Monochrome compression = CCI
7. Fonts = Embed
8. Use built-in fonts only
9. If using color management, the ICC profile will be embedded in the document.
10. sRGB color space
11. Working space RGB = sRGB IEC619662.1
12. Working space CMYK= US web Coded (SwOP)v2
13. Advanced screen = accept defaults (reconsider checking Save PDF settings within PDF file).

Click "OK" to close the "Properties" dialog box, accept the defaults for the "Print" dialog and click "OK." This process will create an Acrobat file that should be named, saved on the hard drive of the computer, and opened in Acrobat.

2.2 Modify and create a "master" Acrobat file

2.2.1 Bookmarks

Bookmarks are a convenient way for readers to move around within Acrobat files. Use of bookmarks for navigating to the following elements is required (adding additional bookmarks is optional):

- Publication information page
- Table of contents
- Foreword (if present)
- First page of each article
- References section of each article
- Each image (only if images are placed at the end of the articles otherwise bookmarks are not required for images)

Bookmarks for each article should be labeled using the full article title (Acrobat has an apx. 40 character limit for bookmarks, which means some titles will be truncated). Image bookmarks should be labeled using the figure number and a brief description of content derived from the caption, such as "*Figure 1. Ivory Coast wood sculpture*" Bookmarks for references and images should be nested under each article as shown in the left column of Figure 2.
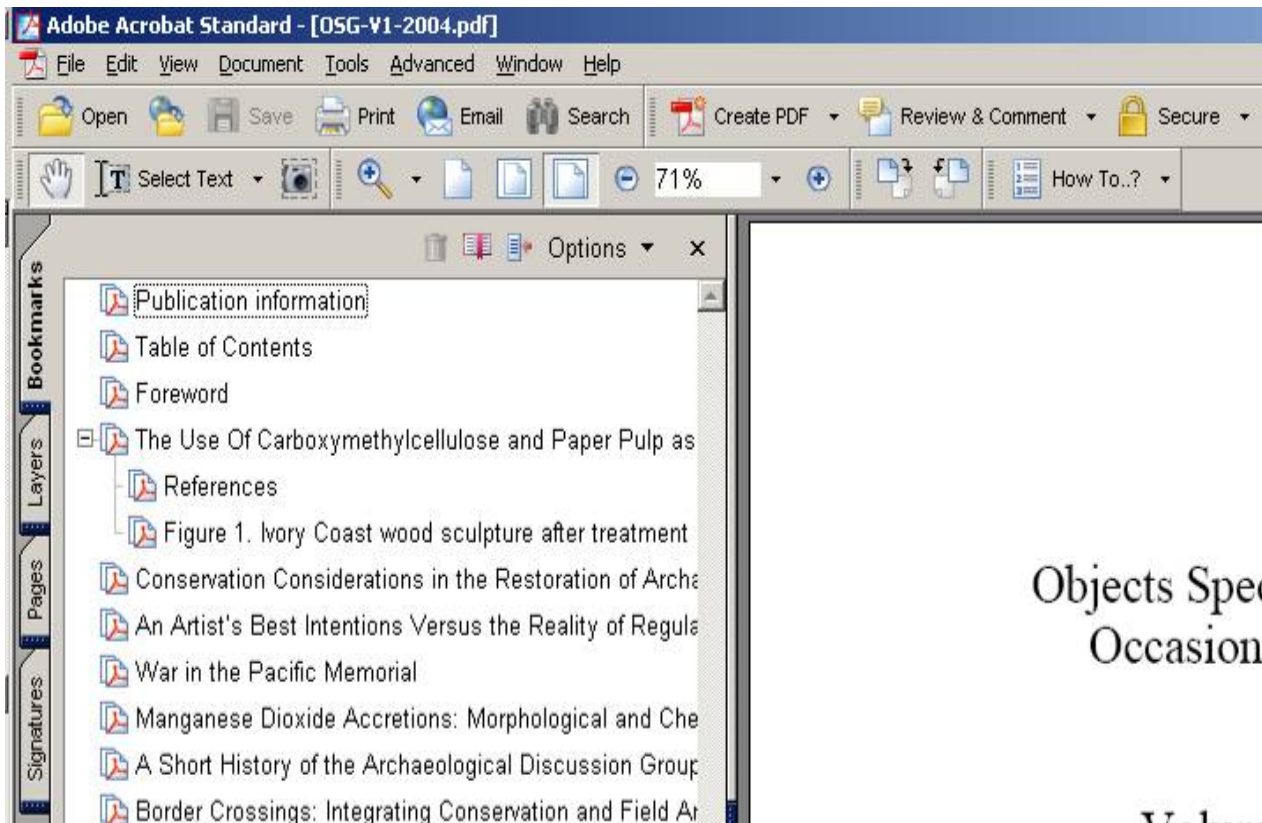
Figure 2: Book marks with "nested" bookmarks for references and an illustration

The method for creating Bookmarks is fully explained in Acrobat Help and will not be repeated here as the methods may change with the release of newer versions of Acrobat. For instruction, search for "Creating bookmarks" and "Creating a bookmark hierarchy" in the complete Acrobat help file.

2.2.2 Hyperlinks

Hyperlinks, like Bookmarks, let the reader navigate to different areas of the document. Using the "Link Tool" (icon of a two chain links) the reader can link to a different page within the document, a different document or a website directly from text or images within the document. One advantage of Hyperlinks over Bookmarks is that the links are extracted along with the individual pages when the Extract Pages function is performed (see 2.2.5). The use of links is optional for images in individual papers.

The method for creating Links is explained in the Acrobat Help file, under "Link Tool". In order to link text to a particular image, rather than a section on the page or an entire page, first a snapshot has to be taken of the image that will be linked. Using the "Snapshot Tool" (icon of a camera), a box is drawn around the image to take a "snapshot" of it which pastes it on the clipboard. The Links Tool can then be used, using the Custom Link, to link text to the image "snapshot". In the "Action" tab, make sure to select "Go to a Snapshot View". Creating a link using the snapshot tool can be found in Acrobat help. It does not seem possible to takes several snapshots of images and then link them to text. The Link must be created after taking the snapshot, moving between the two different tool windows.

Once the link is created, the text that will link to the image will either have a rectangle drawn around it (in whatever color you choose), which readers can click on, or it can have no box at all. To indicate the text is a link, the arrow ("Select object tool") that is activated when the Acrobat file is read,

will turn into a hand. The reader clicks on the area with the mouse and is taken to the linked image. Unfortunately the Links tool does not let you highlight or underline the text as with hyperlinks in MS Word. Some users may find the box around the linked text obstrusive or unsightly. Having no box around the linked text may make it difficult for readers to know there are links in the document and where they are.

2.2.3 Page Numbering

By default, Acrobat numbers pages starting with the first page of the document. Therefore Acrobat's pages numbers will not match the page numbers in the original document which start on the first page of the first article. Adjusting Acrobat's default page numbering is required to coincide with the page numbering of the original document. This is a simple task best explained by searching for "numbering" in the complete Acrobat help file. During this process, a dialog box like the one in Figure 3 will open. In the "Style option" drop down box select "i, ii, iiii, …" as shown.
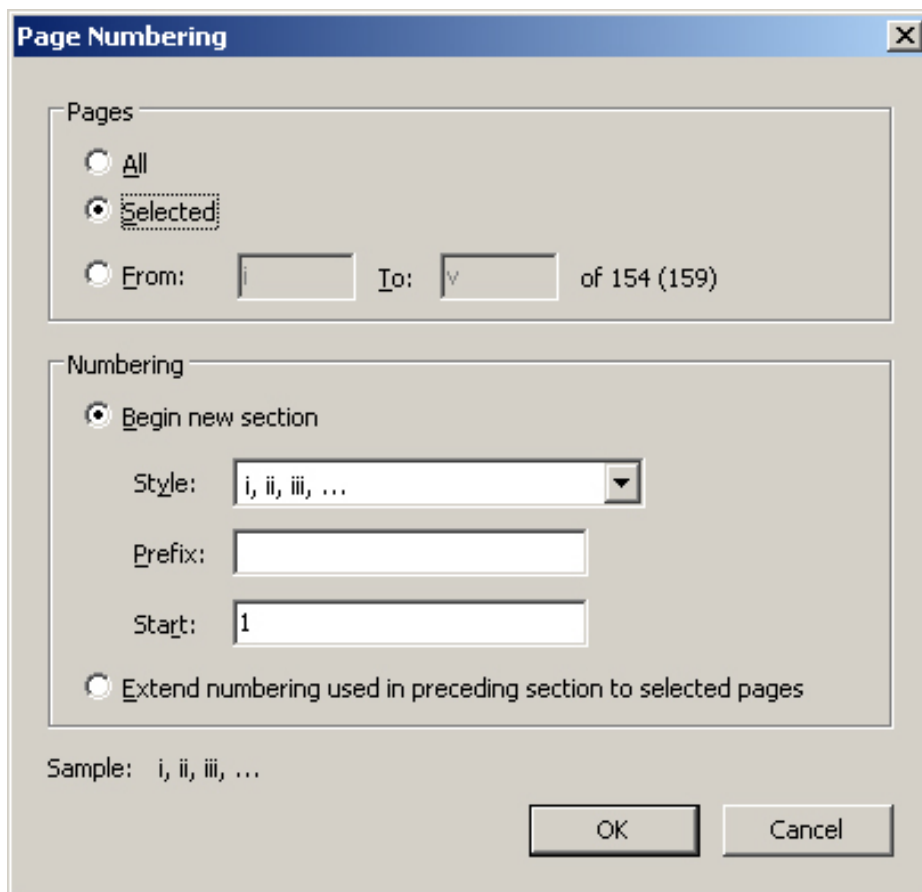
Figure 3: Re-number frontmatter using "i,ii,iii"

2.2.4 Document properties, file size reduction and saving the master Acrobat file

Acrobat provides descriptive fields for characterizing documents. These metadata fields are can be accessed by clicking "Document Properties" in the menu under "File" or by hitting the "Ctrl+D" keys (on the Windows platform). While these fields appear useful, there is no prevailing standard for

libraries or digital repositories to access these fields in any automated way and it is unclear if these fields will ever map to existing cataloguing standards and finding aids. For these reasons, the Publications Committee recommends that most default entries be accepted and empty field be left blank. Acrobat does require two fields: "Title" and Author" which are found under "Description" heading. These fields will be automatically filled with default values unless manually changed as shown in Figure 4. As the default values usually present incorrect information they should be replaced. The title field should be filled with the title preceded by "AIC," and followed by the volume number and the date such as "*AIC Objects Specialty Group Occasional Papers, Vol. 1, 2004.*" The default information in the author field should be replaced by the author or editor name(s) such as "*Edited by John Doe and Jane Doe.*" Besides document properties, Acrobat has entirely separate fields it refers to as "Document Metadata." These fields are blank by default, and for the same reasons stated above, should stay that way. Over time, these fields may prove useful for cataloguing Acrobat files as clear correlations between prevailing cataloguing standards emerge. At this point, the recommendation for leaving fields blank will be revisited and this recommendation may be revised.
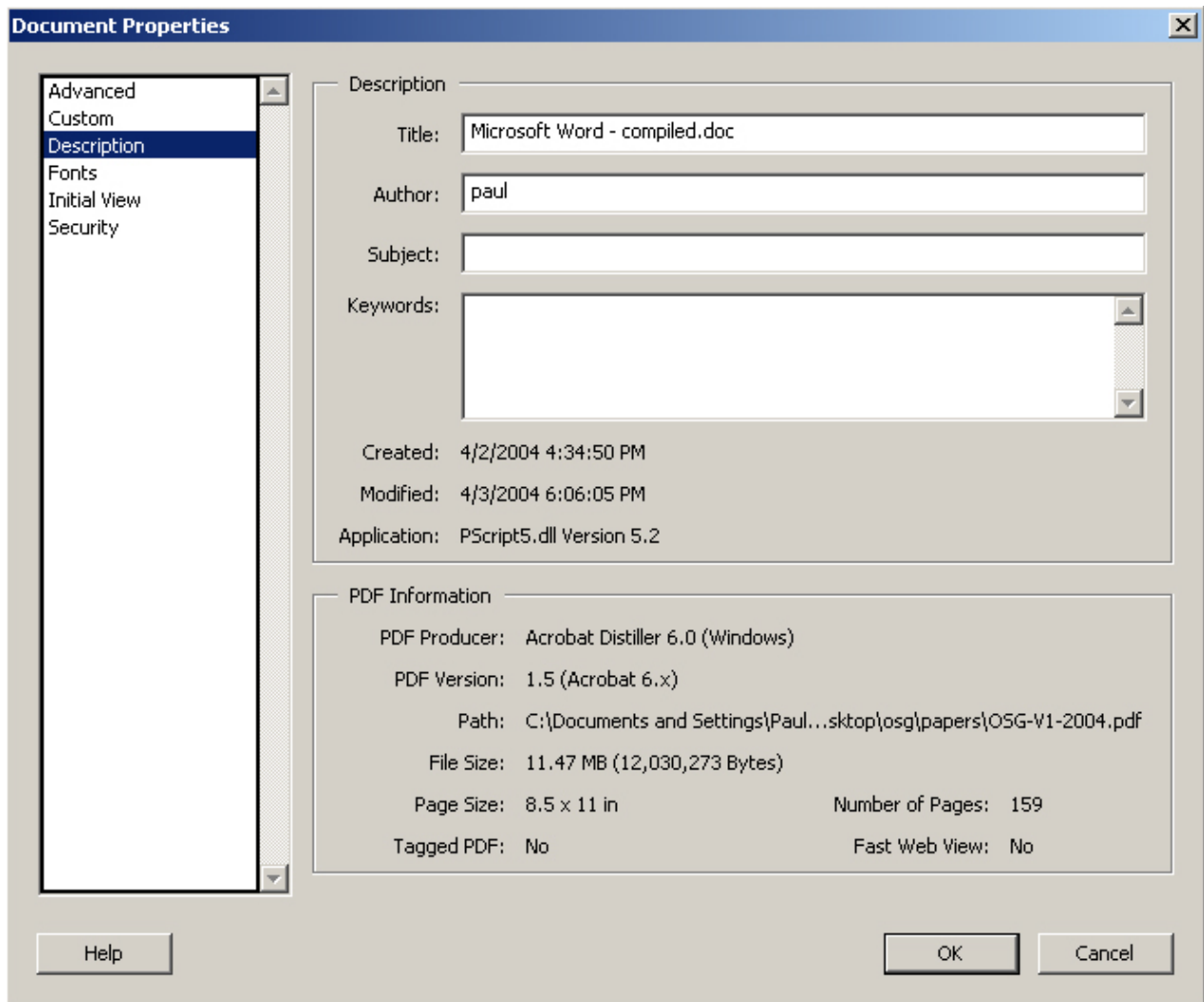

Figure 4: Document property fields

Documents of any length that contain images can produce large files. In general reducing the file size should not be an issue as the 600MB capacity of a CD ROM should be large enough to accommodate the master Acrobat file, individual files for each article and other supporting information. However, reducing the file size has other advantages including easier delivery over computer networks such as the Internet. For Acrobat, reducing file size has other advantages since it removes extraneous information Acrobat uses to construct the original file, such as embedded fonts and repeated images. Reducing file size is an optional and accepted practice under these "Best Practices" guidelines. Acrobat files are reduced by selecting "Reduce File Size" under the "File" menu. The first dialog box deals with Acrobat version, compatibility: select Acrobat 5.0 and later and click "OK." The next dialog requires the file be named and saved. The recommended file naming convention uses 1) the initials of specialty group, 2) followed by the volume number (if a serial publication), 3) followed by the year of the publication. These elements are separated by hyphens with the letter "v" preceding the volume number. Only lowercase letters should be used in the file name and no spaces should appear in the file name. For example volume 1of the Objects Specialty Group Occasional Papers published in 2004 would be named *osg-v1-2004.pdf*. Likewise, volume 12 of the Photographic Materials Group Postprints from 2005 would be named *pmg-v12-2005*. Saving the document and reducing the file size compresses all images. For this reason the Specialty Groups are advised to retain non-compressed images saved as individual files using the TIF image format.

2.2.5 Security

Acrobat contains features that can restrict the ways a reader uses a document. The security features can restrict printing, editing, and the copying of images and text. These security features are designed to protect copyright holders, helping to insure that copyright protected content is not misused. A downside to applying restrictions is that Acrobat relies on a proprietary encryption protocol to apply its security features. The impact of applying security features is currently a matter of some debate as many colleting institutions and digital repositories refuse to accept encrypted work due to the perceived inability to migrate the work forward to other file formats and computing platforms. Therefore, it is the recommendation of the Publications Committee that Acrobat's security features are not employed.

2.2.6 The master Acrobat file and "extracted" files

Saving the file creates a single compiled "Master" document containing all frontmatter and each article in sequence. As such, this master document is well suited for print on demand applications and can be distributed as a completed project using the steps for CD-ROM creation detailed below. Once this master document is created, it is a required practice that it be printed single sided using a monochrome laser printer set to a minimum resolution of 600dpi on paper that meets ISO 11108 for permanence. This paper copy should be sent to the AIC office for non-circulating long-term reference.

Despite any file size reduction, this master file can still be quite large with 10MB not uncommon for a group of papers with illustrations. Extracting and saving individual papers from this master document can create much smaller individual files and present readers with additional functionality and ease of access. As such it is a recommended, but not required, practice to extract the each article and the frontmatter from each master document.

Extracting pages is covered in detail in the Adobe help file, search for the keywords "extracting pages." The process is fairly simple. **For Mac users:** Click Document / Pages / Extract. **For PC users:**

from the pages view, hold down the Shift key and Click on the thumbnails pages, establishing the sequence of pages to be extracted. Once the pages are selected, use a right mouse click (Windows platform) to bring up a menu of options. Select "Extract Pages" as shown in Figure 5.
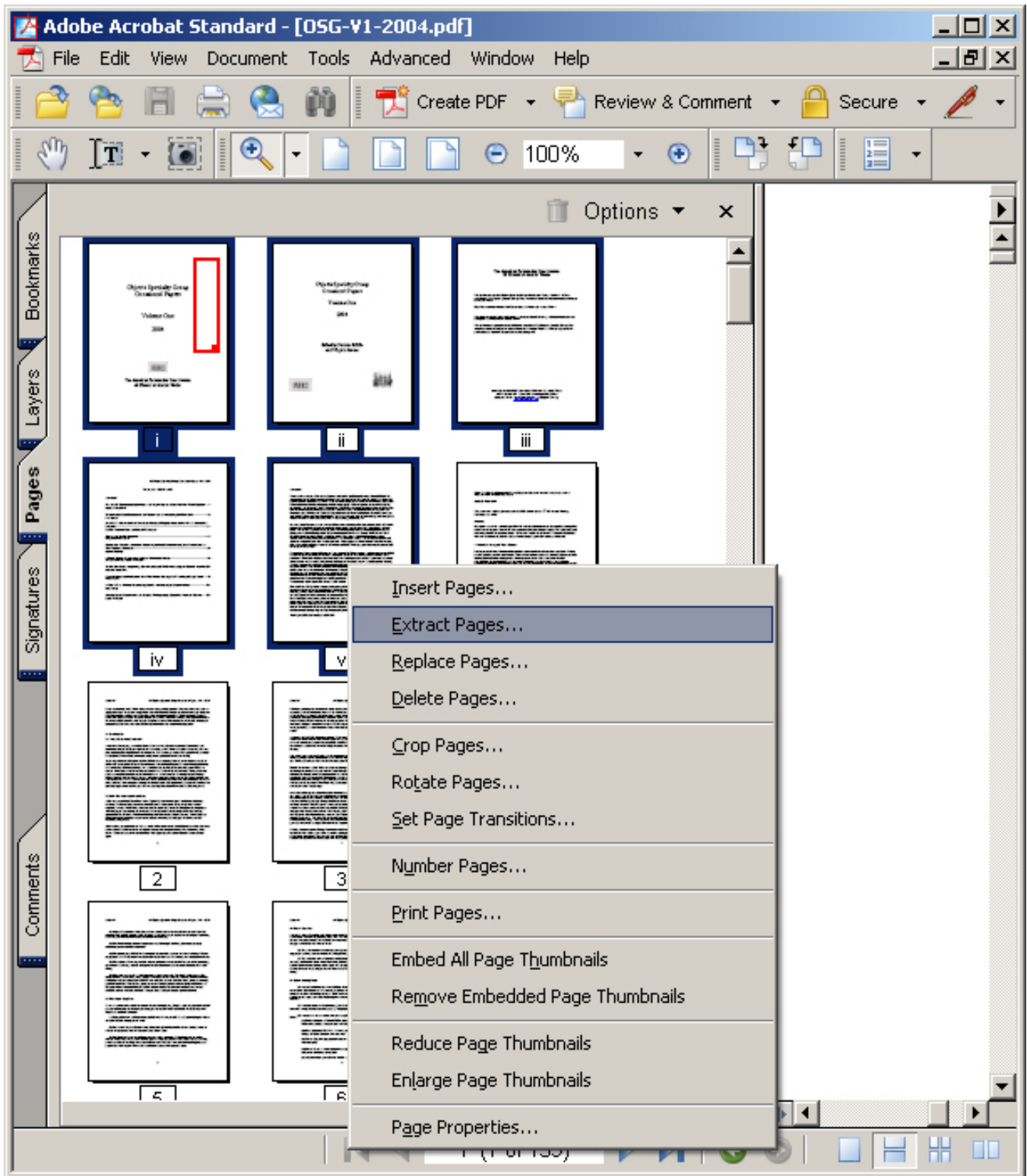
Figure 5: Extracting selected pages

The next dialog box confirms the page numbers to be extracted. Be sure "Delete Pages after Extracting" is unchecked and click "OK." A new instance of Acrobat will open, containing only the extracted pages. Unfortunately, this process deletes book marks, so these will have to be re-done for each paper. If hyperlinks were included in the master document, these will be extracted with the pages. These extracted pages are then saved to the same directory as the master file. This process should be repeated for each article and, at minimum, frontmatter. The naming convention for the extracted files uses the corresponding author name followed by a hyphen followed by the secondary author name (if applicable). For articles with more than two authors, use only the first two author names. As with the master pdf file, use only lowercase letter and no spaces. For example, an article by Smith and Jones would be saved as *smith-jones.pdf*. Frontmatter should saved simply as *frontmatter.pdf*. Once all the files have the files have been extracted and saved, the Acrobat program can be closed.

3.0 Creating a master CD-ROM

3.1 Directory structure and supporting files

All Acrobat files (the master and all extracts) should be saved in a directory called "Papers." The "Papers" directory is in turn placed in a root directory. This root can be named anything convenient and placed anywhere on the host computer as shown in Figure 6.
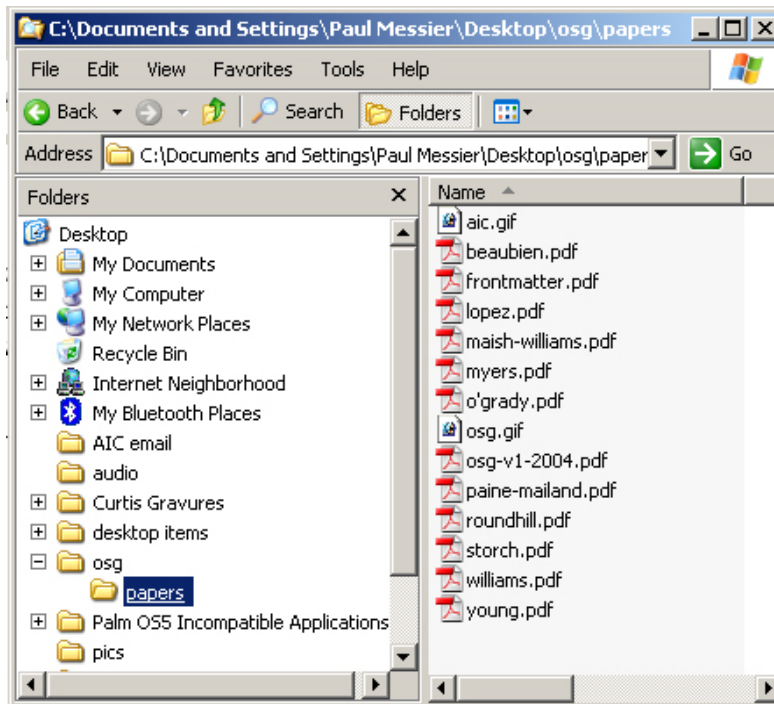

Figure 6: Directory structure for the root and "papers" directory

At minimum, two additional supporting files are required: a "ReadMe" file and a "Start" file. Both of these files should appear in the root directory.

The ReadMe file is a plain text file that describes the content on the CD-ROM and provides a reader with direction for accessing the Acrobat files. At minimum, the ReadMe file should contain the title of the publication, a subtitle (if applicable), the conference name, date and place (if applicable), the compiler / editor name(s), volume / issue numbering, the publication date and all information from the Publications page (see section 1.1). A brief description of the software used to create and access the documents is also required such as "*The files on this disc were created using Adobe Acrobat version 6.0. An Acrobat reader is available from Adobe, see http://www.adobe.com.*" The ReadMe file should instruct the user to open the "*start.html*" with a sentence like "*To access the content on this disc, open the 'start.html' file located in the root directory of this CD-ROM. This file contains links to a master file containing all the compiled papers, as well as links to the individual papers and front matter.*"

The ReadMe file should be named *readme* (all lower case) and saved as plain ASCII text with a .txt file extension

The "Start" file is the reader's primary interface, providing a unified navigational structure to the content on disc. As an HTML file, it will open on any computing platform and on any computer that has a web browser installed. The Start file is required to have all of the information included on the ReadMe file presented as text (not images) with the exclusion of the reference to the *start.html* file. In addition, the following elements must appear on the Start page: under the heading "Table of Contents:"

- Hyperlink to the extracted *frontmatter.pdf* file, text for this link can read "Frontmatter" or "Frontmatter and Foreword," if applicable;
- Hyperlink to each extracted article; text for these links should be the title of each article. The author(s) names should appear after the hyperlinked titles, if applicable;
- Hyperlink to the master Acrobat file; the text for this link should be the title of the publication, the volume and the publication date.
- The AIC logo is a required element. Other images, such as the Specialty Group logo, are optional.

The Start file should be named "*start.html*" using the full four letter .html file extension. The file should be valid HTML (see References for an HTML validator) and should be tested thoroughly especially confirming hyperlinks work as anticipated. The title, volume and date of the publication must appear in the HTML file's header using the title markup tags as in the following example:

<title>Objects Specialty Group Occasional Papers, Volume One, 2004</title>

3.2 Creating a master CD-R

At this point in the process, the root directory and all included files and subfolders are transferred to a master CD-R. Computers with installed CD-R burners are commonplace and there are a variety of software options for making this transfer. Most software will prompt for a "Disc Name." Enter the initials of the Specialty Group, the volume number and the date with each of these elements separated by hyphens and the letter "v" preceding the volume number as described in section 2.2.3. As before, use only lowercase letters and omit spaces in the disc name such as *osg-v1-2004* or *pmg-v12-2005*. Another useful option is to have the software verify the data transfer. Once the CD-R is created, it should be tested thoroughly using the *start.html* file to bring up each of the linked Acrobat files. Testing should be conducted on as many computers as convenient and across computing platforms if possible. Making at least one backup CD-ROM is highly recommended.

3.3 Jewel case design and labeling

Only full, standard, jewel cases should be used to house the CD-ROMs. Use of so called "Slim-Pack" cases or paper / Tyvek envelopes is not permitted under these guidelines. Jewel case labels are required to have each element shown in Figure 6a and 6b and the following table. In addition, the CD-ROM itself is required to be labeled.

Figure 7a: Jewel case opened showing front cover, spine and back cover

Figure 7b: Inside of jewel case showing inside cover, and fore edge

Elements for jewel case and CD-ROM labeling	
Front Cover	**Required**
Title	Required
Subtitle (if applicable)	Required
Volume	Required
Date	Required
AIC logo	Required
AIC name	Required
Specialty group logo	Optional
Specialty group name	Optional
Inside Cover	**Required**
Title	Required
Volume	Required
Date	Required
Copyright statement	Required
Instructions (see below for explanation)	Required
ISSN	Required
Level of review	Required
Statement on distribution, intended audience and purchasing information	Required

AIC address	Required
AIC www address, using fully qualified URL	Required
Back Cover	**Required**
Title,	Required
Subtitle	Required
Volume	Required
AIC name	Required
Table of contents (listing articles only without page references)	Required
Spine	**Required**
Title	Required
Volume	Required
Date	Required
Fore edge	**Optional**
CD-ROM	**Required**
Title	Required
Subtitle (if applicable)	Required
Volume	Required
Date	Required
AIC logo	Required
AIC name	Required
AIC address	Required
AIC www address, using fully qualified URL	Required
Abbreviated copyright statement	Required
Specialty group logo	Optional
Specialty group name	Optional

The instructions on the inside cover should read simply: "Insert disc and open file *readme.txt for* instructions on how to use this disc. You may also access the content on this disc directly by opening the start.html", or some equivalent statement.

The CD-ROM should be labeled using commercially available, purpose designed, inkjet or thermal printing. Since the application of inks can impact disc flatness and balance, working with a reputable commercial vendor for any large-scale project is recommended. Any vendor contract should be checked carefully to insure the vendor will replace defective discs. The use of silk-screen printing, self-adhesive labels and markers is not recommended.

3.4 Burning discs and distribution

Following the creation of the master disc and jewel case design, the final step is to burn multiple copies and distribute the final product. Numerous vendors provide these services and prices and levels of service vary. An important issue in selecting a vendor is the quality of discs used for distribution. Current expectations are that CD-ROM discs should last anywhere between 20 to 100 years if stored under appropriate conditions. This lifespan is sufficient since CD-ROM playback devices will most likely be obsolete within a decade or so. Anything less that a 20 year lifespan would be considered unacceptable. CD's with a golden, non reactive reflective layer and phthatalocyanine dye layers have been found to possess better ageing properties in accelerated ageing tests. The majority of vendors do not used gold discs for duplication, but instead use silver or white inkjet discs. The dics are often duplicated in large quantities as part of a package that includes labeling and packaging of the CD's. This

is generally a paper sleeve, but for an extra fee, they can be replaced with jewel cases. The range of vendors and their services is extensive but vendors can be found that will duplicate CD's using the recommended guidelines: gold CD's, labeled using thermal printing, and packaged in jewel cases. Though this may make duplication slightly more expensive than the standard packages offered by the vendors, it is the best way to ensure high quality archival publications.

It is strongly recommend that any large order of discs and jewel case be preceded by a very small order of one or two discs. This "proof" of both disc content and label along with jewel case labeling should be tested and inspected thoroughly prior to placing a larger order. Once these elements pass inspection, the final steps are to burn the discs and distribute.

4.0 References

National Archives and Records Administration. *Digital-Imaging and Optical Digital Data Disc Storage Systems: Long-Term Access Strategies for Federal Agencies.* 1994.
http://www.archives.gov/research_room/media_formats/digital_imaging_and_optical_disc_storage_report.html

National Institute Standards and Testing. *CD and DVD Archiving: Quick Reference Guide for Care and Handling*
http://www.itl.nist.gov/div895/carefordisc/disccare.html

Fred R. Byers. *Care and Handling of CDs and DVDs: A Guide for Librarians and Archivists.*2003.
http://www.clir.org/pubs/reports/pub121/contents.html

Charles W. Bailey, Jr. *Scholarly Electronic Publishing Bibliograph.y*1996-2004
http://info.lib.uh.edu/sepb/sepb.html

Walter Henry. Conservation Online *Electronic Storage Media*
http://palimpsest.stanford.edu/bytopic/electronic-records/electronic-storage-media/

Media Sciences Inc. *Frequently Asked Questions*
http://www.mscience.com/faq.html

W3C. *Markup Validation Service*
http://validator.w3.org/

5.0 Glossary
Glossary BP Off-line Electronic Publications

Adobe Capture	"Adobe Capture® turns printed business and "legacy" documents into indexable electronic files that look exactly like the original. More than a bitmap scan of the source documents and more than an OCR (optical character recognition) read and conversion of the text, captured documents retain the font and typesetting characteristics, layout, and images composed the way the original document was composed. The resulting files are PDF format so that they can be Cataloged and added to other PDF documents or server locations." http://www.performancegraphics.com/Pages/capture.html

ASCII text	"Acronym for the *American Standard Code for Information Interchange*. Most basic open standards for electronic publication, a document without any formatting (i.e. 'plain text'). ASCII is a code for representing English characters as numbers, with each letter assigned a number from 0 to 127. Most computers use ASCII codes to represent text, which makes it possible to transfer data from one computer to another." http://www.performancegraphics.com/Pages/capture.html
CD-R	CD-R (*Compact Disk Recordable*) A blank CD is 700 megabytes and can be used to store digital data. Once own media are burnt onto them, they become then permanent and the CD can't be altered.
CD-ROM	CD-ROM (*Compact Disk, Read-Only Memory*) A type of write-once, read-many (WORM) disk used to store and distribute large amounts of digital data on low-cost, optically recorded media. CD-ROMs profess to have much longer storage life ratings than magnetic media such as tape or hard disks, though there have been a few notable instances of failure in less than five years. Gold-reflective-layer CDs are most recommended for long-term storage. A standard CD-ROM stores approximately 650 megabytes of data. http://www.getty.edu/research/conducting_research/standards/introimages/glossary.html
CMYK	"Short for *Cyan-Magenta-Yellow-Black*. CMYK is a color model in which all colors are described as a mixture of these four *process colors*. CMYK is the standard color model used in offset printing for full-color documents. Because such printing uses inks of these four basic colors, it is often called *four-color* printing. In contrast, display devices generally use a different color model called *RGB*, which stands for *Red-Green-Blue*. One of the most difficult aspects of desktop publishing in color is color matching -- properly converting the RGB colors into CMYK colors so that what gets printed looks the same as what appears on the monitor." http://www.webopedia.com/TERM/T/TIFF.html
Colophon	"An embellishment sometimes added on the last page of a specially designed and produced book, in this sense not simply the publisher's device but an inscription including the facts of production…. This practice is not so common in book publishing today as it once was." (*Chicago Manual of Style, 1982, p.30*).
Encryption	"The translation of data into a secret code. Encryption is the most effective way to achieve data security. To read an encrypted file, you must have access to a secret key or password that enables you to decrypt it. Unencrypted data is called plain text; encrypted data is referred to as cipher text." http://www.performancegraphics.com/Pages/capture.html
GIF	Acronym for *Graphic Interchange Format*. "A widespread digital image file format introduced by CompuServe, which supports basic animation capabilities and uses LZW compression. Can provide only 8-bit color (256 colors) and employs an adaptive palette for each image, making GIF undesirable for most continuous tone images, such

	as photographs, though useful for limited-palette, monochrome, or thumbnail images." http://www.getty.edu/research/conducting_research/standards/introimages/glossary.html
HTML	Short for *Hypertext Markup Language*. "Uses a system of tags to describe the structure and layout of a document in a manner that makes it viewable by web browsers and other forms of software." http://www.webopedia.com/TERM/T/TIFF.html
Hyperlink	"An element in an electronic document that links to another place in the same document or to an entirely different document. Typically, you click on the hyperlink to follow the link. Hyperlinks are the most essential ingredient of all hypertext systems, including the World Wide Web." http://www.webopedia.com/TERM/T/TIFF.html
ICC	Acronym for *International Color Consortium*. "Body promoting the standardization of open, vendor-neutral, cross-platform color management system (CMS) architecture and components. Developer of the ICC color profile specification." http://www.getty.edu/research/conducting_research/standards/introimages/glossary.html
JPEG	Acronym for *Joint Photographics Experts Group*. "A 24-bit compression method developed specifically for the online display of photographic images. JPEG uses a 'lossy' compression method, which means that it removes information from the source image during the file creation process in order to make the final image smaller for online use. Most software applications that are capable of producing JPEGs also allow the user to specify the level of compression, which allows for smaller files, but with a corresponding loss in image quality." http://www.collectionscanada.ca/9/13/index-e.html
Metadata fields	"Commonly defined as "structured data about data," or data captured in specific categories or elements. Metadata can include data associated with either an information system or a data object or set of objects for purposes of description, administration, preservation, the documentation of legal requirements, technical functionality, use and usage, and so forth." http://www.getty.edu/research/conducting_research/standards/introimages/glossary.html
RGB	Short for *red, green, blue monitor*, a color model used by display devices such as monitors. See CMYK.
Root directory	"The top directory in a file system. The root directory is provided by the operating system and has a special name; for example, in DOS systems the root directory is called \. The root directory is sometimes referred to simply as the *root*." http://www.webopedia.com/TERM/T/TIFF.html
ReadMe file	"A small text file that comes with many software packages and contains information not included in the official documentation. Typically, readme files contain late-breaking information that could not be included in the

	printed documentation." http://www.webopedia.com/TERM/T/TIFF.html
TIFF	"Acronym for *tagged image file format*, one of the most widely supported file formats for storing bit-mapped images on personal computers (both PCs and Macintosh computers). TIFF graphics can be any resolution, and they can be black and white, gray-scaled, or color. Files in TIFF format often end with a *.tif* extension." http://www.webopedia.com/TERM/T/TIFF.html
Valid HTML	A valid HTML document declares what version of HTML is used in the document. http://www.w3.org/TR/REC-html40/struct/global.html. Using valid HTML code that conforms with the standards of the World Wide Web Consortium will ensure proper accessibilties and display.
Working space CMYK/ Working space RGB	Setting a specific working space is a way of standardizing the color balance created at one particular computer setup (that may include monitor, printer, scanner) for display at other setups.
XML	Short for *eXtensible Markup Language.* "A simplified subset of SGML designed for use with the World Wide Web that provides for more sophisticated, meaningful (semantic), and flexible data structuring and validation than HTML. XML is widely forecast to be the successor to HTML as the language of the Web and is an essential component of the proposed Semantic Web." http://www.getty.edu/research/conducting_research/standards/introimages/glossary.html