

Chapter 6 - Computer Concepts and Legal Applications

File Formats

There are hundreds of computer file formats, such as TIFF, DOC, PDF, etc. A file format is used for encoding information in a computer file. Each different type of file has a different file format. The file format specifies how the information is organized and also what software programs can read it. For example, different file formats for a bit-mapped graphics file are set out below.

Format	Description
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BMP	
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The bit-mapped file format used by	Microsoft Windows.
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GIF	
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The bit-mapped file format used by	CompuServe and many other BBSs.
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PCX	
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Originally	developed by ZSOFT for its PC Paintbrush program, PCX is a common graphics file format s
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TIFF (Tagged Image File Format)

A standard file format for storing images as bit maps. It is used especially for scanned images because

- Table courtesy of Webopedia (www.webopedia.com).

File formats generally are dependent on the specific application software you are using. For example, for graphic programs, PhotoShop, EPS, TIFF, and BMP are common formats. For multimedia files, QuickTime, AVI, and WAVE, are used and for web files, GIF and JPEG are used.

Each file format has certain advantages or disadvantages. For example, the file format JPEG (Joint Photographic Experts Group) is an excellent way to send photos as an e-mail attachment. This format compresses the picture into a size 1/10 the size of the uncompressed original with little noticeable loss of quality. Nearly all graphics programs allow you to save photos in the JPEG format. For other file formats visit Webopedia (www.webopedia.com).

PDF - Portable Document Format

PDF stands for Portable Document Format, and is a file format by Adobe Systems (www.adobe.com).

PDF captures formatting information from a variety of word processing and desktop publishing applications, making it possible to send formatted documents and have them appear on the recipient's monitor or printer as they appeared in the senders software program. To view a file in PDF format, you need Adobe Acrobat Reader, a free application distributed by Adobe Systems.

PDF is one of the most widely used "document" formats in the technology world and in the courts. Many courts are using it as the standard format for the filing of court documents in jurisdictions that permit electronic filing. It is also being used as the document format for filing of CD-ROM briefs with the courts. Many in the legal profession have expressed opposition to the

format because it is a “proprietary” file format and special software has to be purchased to author a PDF document. For that reason, HTML and XML are proposed by many legal groups to be the “open standard” for electronic filing and other legal applications.

Some of the features of the PDF format include:

- PDF can import TIFF, DCX, GIF, BMP, and PCX, which can be converted into regular PDF files using the Acrobat Capture Plug-in.
- PDF files allow information to be transmitted in different ways; for example, individual pages of the motion or brief could be faxed directly from the motion or brief.
- Since one can download Adobe Acrobat Reader free of charge, PDF files are universally accessible without necessitating financial commitment to the software, unless you wish to author PDF documents.
- One can search the PDF document using Acrobat full text software.
- PDF is a platform independent format. You do not have to worry about which version of word or WP is being used.
- Files can be saved directly into PDF, preserving the appearance of the original. All fonts, colors and formatting are transferred exactly as they appear in the original. It can also preserve more complex interdocument attributes, such as hyperlinks, bookmarks, or buttons.

- XML – Extensible Markup Language.
Defines data so that software
applications talk to each other and
exchange data over the web.

PDF files can include pop up list boxes, checkboxes, or buttons for gathering of data.

- Acrobat annotation tools offer annotation and mark-up tools. Highlighting, strikethrough, circling, underlining, and comment boxes, support for digital signature, and the ability to collect web content into PDF are available. It can be used effectively for trial presentation.
- Adobe has an Adobe Document Server for PDF files on firm Intranets.
- As the web becomes a common carrier for business and legal documentation, PDF has joined HTML and XML as core file formats for document management.
- The Adobe authoring software-annotating tools makes it a good product for group collaboration.
- The point about PDF in the knowledge management area is that it gives one a universal document format.
- Collaboration and comments can be added to documents in separate layers. Stamps such as confidential, draft, final, and other user created messages are available.
- Adobe has partnered with Versign and others to create a digital signature format.

Because of the significant use of the PDF format in the legal profession and business, it is generally a format one should consider in electronic filing, CD-ROM briefs, collaborating on client documents, litigation support, and for trial presentation.

Converting computer data from one usable format to another.

Compatibility of software file formats is necessary not only to share data within your applications, but with other attorneys or the court, etc. You need to know how to convert data from one usable format to another. Conversion issues can arise in using a file from one version of a word processing program to a different version of the same word processing program. Issues can also arise from converting word processing information into spreadsheet, database, or graphics presentation data.

Some suggested methods or tips for solving or preventing conversion problems include:

- Software conversion. A popular conversion software to convert data from one format to another format is Data Junction software (www.datajunction.com). Also, Image Alchemy (www.handmadesw.com) provides conversion utility for more than 70 supported image files.
- Questions for users. When getting a file from a colleague or others, one needs to ask from what type of computer (Macintosh, etc.) and platform (DOS, Windows, etc.) the file originated from? Also, one needs to know whether the file is from a word processor, spreadsheet, database, etc.; what brand and version of software is being used; can it be converted to ASCII, and who is the person to contact if problems arise?
- Disk Labeling. Label the platform (Macintosh or PC), file format and application program (word processing, database, graphic, etc.), and program version on the transfer disk;
- Client and co-counsel compatibility. Determine early on in the process the platform and application compatibility of your client or co-counsel.
- File extensions. Extensions on a file may provide the information to convert a file, so label the disk accordingly. For example, .WP, .WP5, .DOC disclose that it is a word processing file; .WK1, .WK3, .XLS are spreadsheet files; .DB, .DBF, .DTF, .MDB are database extensions; and .PCX, .TIF, .BMP, .WPG are extensions for graphics. There are many other extensions.

- Automatic conversions. Many applications automatically convert dissimilar file formats into usable data. For example, Microsoft Word automatically converts WordPerfect files into Word documents.
- File Format Save Features. Most popular applications allow the user to SAVE the document in one of a number of popular formats that the end user will be using.
- Exporting and importing technique. Exporting data to a special format to be IMPORTED into another program may be a solution. Determine the importing and exporting capability of your software.
- ASCII conversion. Most data can be stripped down or SAVED to basic ASCII text for importing or conversion into a different file format. The file extensions are usually .TXT or .ASC.
- Data Length. Moving data from a word processor into a database or spreadsheet may require the data be shortened for a field or cell.
- Converting data for use by different application programs will present special problems. As the different programs “integrate” using DDE and other shared data protocols, the difficulty of reusing data will substantially lessen.