

# Introduction to PDF Document Development

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- Introduction and History

Displaying information where it is preferable to retain a rigid format can be difficult when left to a proprietary browser to interpret. Formats, like HTML, may be inadequate to fulfill the needs of a document where form is implicitly tied to content. This need was address by Adobe in the early 90's in the form of the PDF. PDF, *Portable Document Format*, was developed from the cumbersome and clunky post-script file and was invented to fulfill the need for a platform-independent document-oriented display format. Initially, Adobe Distiller 1.0 was released at the prices \$694 - personal, and \$2495 - corporate network, and was thus slow to catch on. However, with a significant price decreases, increased development and options, the availability of a free and fairly versatile reading software, Adobe pdf's have become the industry standard for document solutions.

- Overview

- Composition Software Independence
- (Most)Hardware system Independence
- Operating System Independence
  - Mac OS X uses pdf as its native imaging model [metafile format](#)
  - Currently Microsoft is releasing a competing format codenamed 'Metro' based on XML, which will be implemented with the release of '[Longhorn](#)'.
- Font Independence
  - a font/replacement system to allow fonts to travel with documents.
- Graphic Compression
  - Huge Improvement over [PostScript](#) foramt
- Supports JavaScript tags
- [Open Standard](#)
  - See [Tools](#)

- Practical Examples

- [example1.pdf](#)
  - A simple example of a pdf created from a word document
- [example2.pdf](#)
  - The same document, except note all of the copying and printing functions are disabled. I've also attached a certificate.
- [exampleJapanese.pdf](#)
  - Even if the Japanese character set is not installed on the clients machine, The font set is carried with the document.
- [exampleConfidential.pdf](#)
  - This cannot be viewed unless a password is supplied (128bit encryption). The password is 'test'.

- Relevant Examples

- [Montana Tax Revenue service](#)
  - All the Montana Tax forms are available in PDF forms
- [Montana State University Graduate Studies forms.](#)
  - So are all of the forms for Graduate School
  - Doctoral Dissertations at MSU must now all be submitted in electronic PDF format
- [ITC User Support Associate application for employmet](#)
  - Apply Today for an exciting position in the Student labs (I hear the boss is really cool!)

- Pros over HTML

- End product is deterministic
  - Can change with [reflow](#)
- Searchable
  - [Adobe Reader 6.0+](#) allows searching multiple files
  - [Google](#) incudes its searches within online pdf docs
- Compressable
- Securable
  - 128bit encryption and decryption (RC4)

- Certifiable
  - Copy Protection
- Cons from HTML
  - Device incompatibility (Mobile phones, PDA's)
    - Unless the document is [reflowed](#)
  - Not completely universal
  - Not all features are open standard
  - requires 3rd party software for most (Windows) users
  - Will face competition from Microsoft soon
- Tools
  - [Adobe®Reader](#) - Adobe's free reader of PDF files (a must!)
  - [iText](#) - A java based pdf converter
  - [PDFCreator](#) - A limited use, but free open source PDF creator
  - [pdf 995](#) A very functional PDF package (Has annoying advertisements if you don't pay for it)
  - [PDF::API2 & PDF::MAKI](#) - A Perl module for manipulating PDF files