

PDF Magic in ColdFusion 8

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About me

- President, BlueBrick Inc.
- Adobe Certified Instructor/Developer
- Adobe Community Expert
- Manager, NYFLEX user group
- Author/Speaker
 - CFUNITED, MAX...
 - Co-Author - ColdFusion Developer's Handbook
 - ColdFusion Developer's Journal

Agenda

- <CFDOCUMENT>
 - <CFDOCUMENTSECTION>
 - <CFDOCUMENTITEM>
- <CFPDF>
- Tips and Tricks
- Q&A

<CFDOCUMENT>

<CFDOCUMENT>

- Create PDF (or Flash Paper) from HTML
 - **HTML 4.01**
 - **Highly recommended XHTML 1.0 Transitional**
 - **XML 1.0**
 - **DOM Level 1 and 2**
 - **Partial CSS1 and CSS2**
 - **Border-collapse still does not work**

<CFDOCUMENTSECTION>

- Divides a PDF into sections.
- Sections can have unique headers, footers, and page numbers.
- When using <cfdocumentsection>
 - All text outside <cfdocumentsection> will be ignored
 - Set section specific margins

<CFDOCUMENTITEM>

- Creates Headers, Footers and Page Breaks
- Within a <cfdocument> the <cfdocumentitem> tag applies based on it's location:
 - At the top, it applies to the entire document.
 - In the middle, it applies to the rest of the document.
 - At the end, it has no affect.
- Within a <cfdocumentsection> the <cfdocumentitem> tag applies only to the current section.

<CFDOCUMENT> - New in CF8

- **New Attributes**
 - bookmark
 - localUrl
 - saveAsName
 - authPassword
 - authUser
 - proxyHost
 - proxyPassword
 - proxyPortproxyUser
 - userAgent
- **New Scope variables**
 - Totalsectionpagecount
 - currentsectionpagenumber
- **Embed Forms with <CFPDFFORM>**
- **Pass PDF variable to <CFPDF>**

<CFDOCUMENT> - Creating Bookmarks

- Use `Bookmark="yes"` to automatically create bookmarks

```
<cfdocument format="pdf" bookmark="yes">  
  <cfdocumentsection name="First Section">  
  </cfdocumentsection>  
  <cfdocumentsection name="Second Section">  
  </cfdocumentsection>  
</cfdocument>
```

<CFDOCUMENT> - cfdocument scope

- New *cfdocument* scope variables
 - *cfdocument.currentpagenumber*
 - *cfdocument.totalpagecount*
 - ***cfdocument.totalsectionpagecount***
 - ***cfdocument.currentsectionpagenumber***

```
<cfdocumentitem type= "Header">  
<cfoutput>  
<div align="right">#cfdocument.currentpagenumber#</div>  
</cfoutput>  
</cfdocumentitem>
```

<CFDOCUMENT> localURL

- <CFDOCUMENT localURL="[YES/NO]">
 - Yes – CF gets files directly from local drive
 - No – CF uses HTTP/HTTPS/Proxy to get images
- No “Missing image” issue
- Better Performance

```
<cfdocument format="pdf" localUrl="yes">  
  
</cfdocument>
```

<CFDOCUMENT> saveAsName

- <CFDOCUMENT
saveAsName="[name]">

<CFDOCUMENT> HTTP requests

- **Basic Authentication** for protected remote directories
 - `authPassword`
 - `authUser`

- **Proxy support** for CF servers that access the web via proxy
 - `proxyHost`
 - `proxyPassword`
 - `proxyPort``proxyUser`

- **User agent to be used for making http connection**
 - `userAgent`

<CFDOCUMENT> setting a password

- <CFDOCUMENT
ownerPassword="cfunitied"
encryption="128-bit">
- Encryption attribute **MUST** be used:
 - 128-bit
 - 40-bit
 - Cannot be set to 'none'

<CFDOCUMENT> permissions

- **If ownerPassword attribute is set, users cannot copy/print/etc...**

- **<CFDOCUMENT permissions="[list]">**
 - **AllowPrinting – Allows printing of PDF**
 - **AllowModifyContents – Modify PDF**
 - **AllowCopy – Copy Text from PDF**
 - **AllowModifyAnnotations - Add comments to the PDF**
 - **AllowFillIn - Fill in forms**
 - **AllowScreenReaders - Access through a screen reader**
 - **AllowAssembly – Merge PDF, create bookmarks...**
 - **AllowDegradedPrinting –Degraded printing of PDF**

<CFDOCUMENT> - Additional Attributes

- filename = “[name]” save content to a file
 - Specify overwrite=“yes” otherwise you will get an error when reloading the page
- Src – Get content from URL
- Srcfile – Get content from a local file:

<CFDOCUMENT> - Embedding Forms

- filename = “[name]” save content to a file
 - Specify overwrite=“yes” otherwise you will get an error when reloading the page
- Src – Get content from URL
- Srcfile – Get content from a local file:

<CFDOCUMENT> Embed PDF form

```
<cfdocument format="pdf">  
  
<cfdocumentsection>Please fill out</cfdocumentsection>  
  
<cfpdfform source="#expandpath('.')#\Feedback.pdf"  
action="populate" >  
  
    <cfpdfsubform name="form1">  
        <cfpdfformparam  
            name="Speaker"  
            value="Shlomy Gantz">  
    </cfpdfsubform>  
</cfpdfform>  
  
</cfdocument>
```

<CFPDF>

<CFPDF>

- **Manipulate PDF files**
 - **Merge PDF documents or pages together.**
 - **Delete pages from an existing PDF document.**
 - **Flatten PDF forms**
 - **Encrypt PDF documents**
 - **Password protect PDF documents.**
 - **Generate thumbnails from PDF documents.**
 - **Add/Remove watermarks from PDF documents.**
 - **Retrieve/Set PDF document information**
 - **And much more...**

<CFPDF> Merge 2 PDF documents

- <CFPDF action="merge">

- source = "list absolute path| relative path | PDF variable"

OR

- directory = ""absolute path| relative path"

- Or use <CFPDFPARAM>

<CFPDF> Generate Thumbnail

- <CFPDF action="thumbnail">
 - source = "absolute path| relative path | PDF variable"
 - Scale=[1-100]
 - format = "[png|jpeg|tiff]"
 - destination = "[directory]"
 - imagePrefix – "thumbnail" by default
 - File will be saved as
[imagePrefix]_page_1.[format]

<CFPDF> Add Watermark

- <CFPDF action="addWatermark">
 - source = "absolute path| relative path | PDF variable"
 - copyfrom = ""absolute path| relative path"
 - First page will be used as watermark
 - OR**
 - image = "absolute path| relative path | image variable"

<CFPDF> Retrieve/Set Information

- Retrieving info

```
<cfpdf action="getInfo" source="cfunit.pdf"
name="thePDF">
<cfdump var="#thePDF#">
```

- Setting info

```
<cfset info = structNew()>
<cfset info.Title = "CFUNITED feedback form">
<cfset info.author="Shlomy Gantz">
<cfpdf action="setInfo" source="cfunit.pdf"
info="#info#">
```

<CFPDF> processDDX

- DDX - XML representation of PDF pages, comments, bookmarks, and styled text.
- ColdFusion 8 contains a scaled-down version of LiveCycle Assembler

```
<?xml version="1.0" encoding="UTF-8"?>
<DDX xmlns="http://ns.adobe.com/DDX/1.0/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://ns.adobe.com/DDX/1.0/ coldfusion_ddx.xsd">
  <PDF result="DestinationFile">
    <Watermark rotation="30" opacity="25%">
      <StyledText>
        <p font-size="100pt" font-weight="bold" color="gray" font="Arial">
          DO NOT COPY
        </p>
      </StyledText>
    </Watermark>
    <PDF source="SourceFile"/>
  </PDF>
</DDX>
```

Tips and Tricks

<CFDOCUMENT> Dynamic Page breaks

- `<cfdocumentitem type="pagebreak">` is great, but cannot be invoked dynamically
- Instead you can use

```
<p style="page-break-after:always;">&nbsp;</p>
```

What about ColdFusion MX7?

- Leverage iText and CreateObject()

```
<CFSCRIPT>
function watermarkPDF(pdfFile, jpgFile, newFile, x, y) {

reader=CreateObject("java", "com.lowagie.text.pdf.PdfReader").init(expandpath(arguments.pdfFile));
fileIO = CreateObject("java", "java.io.FileOutputStream").init(expandpath(arguments.newFile));
stamper= CreateObject("java", "com.lowagie.text.pdf.PdfStamper").init(reader, fileIO);

// create watermark images
Image = CreateObject("java", "com.lowagie.text.Image");
jpg = Image.getInstance(expandpath(arguments.jpgFile));
jpg.setAbsolutePosition(arguments.x, arguments.y);
// stamp all pages with watermark
i = 0;
n = reader.getNumberOfPages();
while (i lt n) {
    i=i+1;

    b = stamper.getUnderContent(javacast("Int", i));
    b.addImage(jpg);
}
    stamper.close();
}

</CFSCRIPT>
```

What about older versions ?

- Use FDF to populate forms

```
<CFSETTING ENABLECFOUTPUTONLY="YES" SHOWDEBUGOUTPUT="NO" >
<CFCONTENT TYPE="APPLICATION/vnd.fdf" >
<CFOUTPUT>%FDF-1.2
1 0 obj
<< /FDF
<< /Fields
[
<< /T(Speaker) /V(Shlomy) >>
<< /T(Topic) /V(Magic) >>
]
/F(http://bbvm/projects/cfunitexpress07/Feedback.pdf) >>
>>
endobj
trailer
<< /Root 1 0 R >>
%%EOF
</CFOUTPUT>
```

Modifying the display of inline PDF

- *<http://www.mysite.com/myfile.pdf>*

to:

- *<http://www.mysite.com/myfile.pdf#toolbar=0&page=2>*

http://www.adobe.com/devnet/acrobat/pdfs/pdf_open_parameters.pdf

PDF -Tips and Tricks

- To prevent PDF from opening inline and force a download

```
<cfheader  
name="Content-Disposition"  
value="attachment;filename=cfounded.pdf">
```

Additional tags/functions

- New Functions
 - isPDFFile() – Validates PDF file
 - isPDFObject () – Validates PDF variable
 - isDDX() – Validates valid DDX schema
- <CFPDFFORM>
- <CFPRINT>

Q & A

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