

# PDF Documents and Forms in coldFusion 9

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# Who is this Presentation For?

- Anyone interested in PDF integration using ColdFusion
- Experienced ColdFusion Developers



# Who Am I



- Jeff Coughlin ([jeff@jeffcoughlin.com](mailto:jeff@jeffcoughlin.com))
- Certified FarCry Instructor
- Certified Advanced ColdFusion Developer
- Adobe User Group Manager (Hartford CT, USA)
- Versatile Internet Solutions, LLC, owner
- Working in CF since 1999
- Network Engineer for 7 years before working in ColdFusion



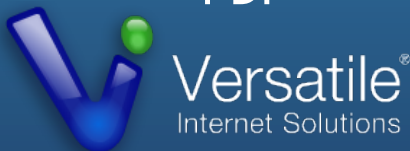
# Agenda - PDF Integration in CF9

- CREATE
  - Dynamically generate PDFs from HTML
- ALTER
  - Create new PDFs from existing PDFs
  - Extract pages from existing PDFs
  - Merge pages from one or more existing PDFs
  - Delete pages from existing PDFs
  - Work with watermarks (add & remove)
  - Work with PDF file metadata (get & set)
  - Encrypt & password-protect PDF files
  - Create thumbnail images of PDFs
  - Flatten PDFs
  - Execute DDX Instruction sets
- OPTIMIZE
- CAPTURE
  - Pre-populate and extract data from PDF forms
- PRINT
  - Server-side printing



# PDF Generation

- Convert HTML to PDF using `<cfdocument format="pdf">`
- This feature was introduced in ColdFusion 7
- ColdFusion 8 introduced several enhancements
  - Support for bookmarks, bookmark hierarchies, and more
  - **totalpagecount** and **currentpagenumber** can now be used within CFML expressions
  - Support for section page counts
- ColdFusion 9 adds even more functionality like converting MSWord and PPT docs to PDF
- CFML is allowable in the body of the tag
  - Some content (most notably Flash) may not render properly to PDF



# PDF Generation Example Code

```
<cfdocument format="pdf">  
  <p>Hello World!</p>  
  <a href="http://www.adobe.com">adobe.com</a>  
</cfdocument>
```

createPDF.cfm





# Demo

## PDF Generation

# Convert MSWord Doc to PDF

```
<cfdocument format="pdf"  
format="#expandPath(\"./mwordSample.docx\")#" />
```

[convertWord2PDF.cfm](#)







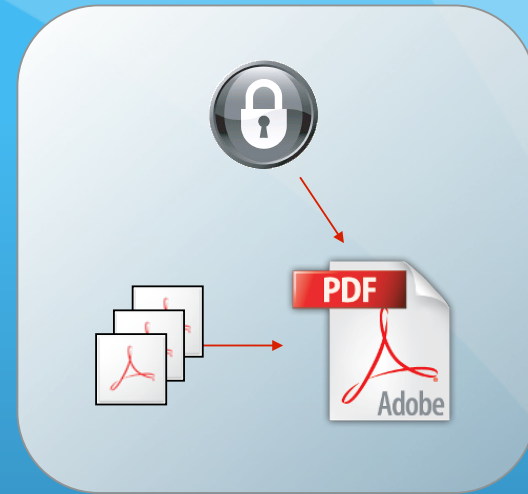
# Demo

## Convert MSWord to PDF

# PDF Manipulation

## <CFPDF>

- Create new PDFs from existing PDFs
    - Extract pages from existing PDFs
    - Merge pages from one or more existing PDFs
  - Delete pages from existing PDFs
  - Work with watermarks (add & remove)
  - Work with PDF file metadata (get & set)
  - Encrypt & password-protect PDFs
  - Create thumbnail images of PDFs
  - Flatten PDFs
- Execute DDX instruction sets
    - Enable advanced functionality
  - New action attribute values added in CF9
  - CF9 also adds 30 new attributes to the <CFPDF> tag allowing for fine custom tuning to your PDFs.



# PDF Manipulation Helper Functions

## **IsDDX()**

- Determines whether a DDX file, pathname, and instructions are not null and are valid
- Verifies that the schema used for the DDX instructions is supported by ColdFusion

## **IsPDFFile()**

- Determines whether a PDF source file, pathname, and version are valid and supported on the server running ColdFusion
- Verifies whether a PDF file is corrupted

## **IsPDFObject()**

- Determines whether a PDF object stored in memory is valid
- Verifies the contents of PDF variables generated by the **<cfdocument>** and **<cfpdf>** tags



# PDF Manipulation Example Code

```
<cfpdf action="getinfo" source="sourceData.pdf"
      name="variables.newData" />

<cfdump var="#variables.newData#" />

<cfpdf action="merge" destination="newData.pdf"
      overwrite="true">

  <cfpdfparam source="sourceData.pdf"
    pages="#variables.newData.totalPages#" />

</cfpdf>
```

extractLastPage.cfm





# Demo

## PDF Manipulation

# PDF Form Operations

**<cfpdfform>** tag used to:

- Populate existing PDF forms
  - Acroforms and XFA
  - Can populate form fields individually or can populate multiple fields at once from an XML file
- Capture data from a filled PDF form
  - Extract from the physical file
  - Process submit directly from Adobe Reader
- Embed a PDF form in a PDF document
  - Note: only 1 PDF form can be embedded in a PDF document

**<cfpdfformparam>** used to:

- Pass values to a form

**<cfpdfsubform>** used to:

- Manipulate nested forms



# PDF Forms Example Code Extract

```
<cfpdfform action="populate" source="helpdesk.pdf">  
  <cfpdfsubform name="form1">  
    <cfpdfsubform name="page1">  
      <cfpdfformparam name="employeeName"  
        value="Jeff Coughlin" />  
      <cfpdfformparam name="submitURL"  
        value="#CGI.SCRIPT_NAME#" />  
    </cfpdfsubform>  
  </cfpdfsubform>  
</cfpdfform>
```

pdfForm.cfm





# Demo

## PDF Forms



# Server-Side Printing

**<cfprint>** tag spools PDF files to a specified printer

- Installed printers are listed in the ColdFusion Administrator
- Provides control over size, rotation, fidelity, color, number of copies, as well as printer-specific options



# PDF Print Example Code

```
<cfprint type="pdf" source="sourceData.pdf"  
printer="printer name here">
```

print.cfm



# Demo

## Server-side printing

# PDF Optimization

- Using `<cfpdf action="optimize">` we can significantly reduce the file size of a PDF by removing extra “fluff” in our PDFs that are often not needed.
- The attributes available to us (when used in conjunction with `action="optimize"`) are:
  - noattachments
  - nobookmarks
  - nocomments
  - nofonts
  - nojavascripts
  - nolinks
  - nometadata
  - nothumbnails



# PDF Optimization Code Example

```
<cfpdf action="optimize"  
  source="helpdesk.pdf"  
  destination="optimizeHelpdesk.pdf"  
  noattachments="true"  
  nobookmarks="true"  
  nocomments="true"  
  nofonts="true"  
  nojavascripts="true"  
  nolinks="true"  
  nometadata="true"  
  nothumbnails="true" />
```

optimize.cfm





# Demo

## PDF Optimization

# What if we're still using CF8?

## Go Beyond What CF8 Can Do Natively

- PDF Utils (CFC) by Ray Camden

<http://pdfutils.riaforge.org>

- Currently supports the following methods:
  - **getExtraInfo** - Returns additional information about the PDF (compared to the cfpdf/getinfo action)
  - **getText** - Returns the actual text of the PDF
  - **getPage** - Returns a page from the PDF. ColdFusion 8 supports deleting pages, but not getting pages
  - **readXMP** - Read XMP data from a PDF
  - **writeXMP** - Write XMP data to a PDF (along with many utility methods)





# Demo

## PDF Utils

(by Ray Camden)



# <Questions />



# Resources

- ColdFusion Developer's Guide  
<http://livedocs.adobe.com/coldfusion/8/>
- Assembling PDF Documents
- Manipulating PDF Forms in ColdFusion
- Creating Reports & Documents for Printing
- CF 9 Docs (Adobe Labs)  
<http://labs.adobe.com/technologies/coldfusion9/>
- PDF Utils by Ray Camden  
<http://pdfutils.riaforge.org>



