

Hidden Gems in CF8

(75 and counting!)

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Topics

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About Charlie Arehart

- Independent consultant since April 2006
- 10 yrs CF experience (25 in Enterprise IT)
 - Member, Adobe Community Experts
 - Certified Adv CF Developer (4 - 7), Cert. Adobe Instructor
 - Co-author, ColdFusion MX Bible (Wiley)
 - Contributor to upcoming CF8 WACK books
 - Frequent contrib. to ColdFusion Dev Journal, blogs, lists
 - Tech Editor, CFDJ (2001-2003)
 - Until recently, President, Atlanta ColdFusion User Group
 - Now co-lead (w/ Ray Camden) Online ColdFusion Meetup (<http://coldfusionmeetup.com>)
 - Frequent speaker: UGs, conf's worldwide
 - Living in Alpharetta, Georgia (north of Atlanta)
- Web home at www.carehart.org
 - Hosts my blog; lists all my past articles, presentations
 - UGTV: recordings of presentations by nearly 100 CFUG speakers
 - AskCharlie: per-minute telephone & web-based CF support

Gems vs Features

- As with each release, there are major features
 - Those shown in product “top 10” lists, marketing materials, focus of conference talks
- But there are also always little hidden gems
 - Don't get as much press
 - Yet sometimes may be the answer to a long-nagging problem
 - Documented in CFML Reference, or Dev Guide
 - Also sometimes more in Release Notes, What's New
- Sometimes, people miss these for years
 - So I like to stress them whenever possible
 - My first CFDJ articles in 1999 were on hidden gems in 4, 4.01
- Are so many in CF8 that we can't cover them all in depth
 - Will try to point out as many as I've gathered
 - Will often point to resources to learn more
 - At least take note if any interest you, and look in the CF8 docs
 - Of course, as time passes, many will no longer be “hidden gems” to most

Coding Gems

Various Coding Gems

- Testing for array element existence, new `ArrayIsDefined()`
 - Takes arrayname and index to test element's existence
 - Example:

```
<cfset test=arraynew(1)>
<cfset test[1]=1>
<cfset test[3]=3>
<cfoutput>#arrayisdefined(test,2)#</cfoutput>
```
 - Notes
 - Was called `ArrayDefinedAt` in earlier betas (mentioned on Ray's blog)
- `ListToArray()` – new option to include empty elements

Various Coding Gems (cont.)

- CFLOOP improvements

- Can now loop over array

```
<CFLOOP Array="#arrayname#"
  name="indexname">
```

- Can loop over File, either per line

```
<cfloop file="c:\simplefile.txt"
  index="line">
```

- Or for a number of characters

```
<cfloop file="c:\simplefile.txt"
  index="chars" characters="12">
```

- <http://coldfused.blogspot.com/2007/07/new-file-io-in-coldfusion-8.html> (Rupesh Kumar)

Various Coding Gems (cont.)

- Implicit array and structure creation

```
<!-- CFMX7 code -->
```

```
<CFSET myArray=ArrayNew(1)>  
<CFSET ArrayAppend(myArray, "Adam")>  
<CFSET ArrayAppend(myArray, "Ben")>  
<CFSET ArrayAppend(myArray, "Tim")>
```

```
<CFSET myStruct=StructNew(<>)>  
<CFSET myStruct.product="ColdFusion">  
<CFSET myStruct.version=8>
```

```
<!-- In CF8, you can use this code -->
```

```
<CFSET myArray=["Adam", "Ben", "Tim"]>  
<CFSET myStruct={product="ColdFusion", version=8}>
```

- <http://www.forta.com/blog/index.cfm/2007/5/1/Implicit-Array-And-Structure-Creation-In-Scorpio>
- <http://www.bennadel.com/blog/740-Learning-ColdFusion-8-Implicit-Struct-And-Array-Creation.htm>

Various Coding Gems (cont.)

- Javascript-style operators
 - Following can be used anywhere in CFML
 - ++, --, %, +=, -=, *=, /=, %=, &&, &=, ||, !
 - Following can be used within CFSCRIPT code
 - ==, !=, <, <=, >, >=
 - <http://www.bennadel.com/blog/741-Learning-ColdFusion-8-All-Hail-The-New-Operator.htm>
 - <http://www.forta.com/blog/index.cfm/2007/5/1/ColdFusion-And-JavaScript-Like-Operators>

Various Coding Gems (cont.)

- Pass tag attributes as collection (attributecollection)

```
<cfset mailAttrs = {  
  To = "charlie@carehart.org",  
  From = "charlie@carehart.org",  
  Subject = "Test Subject"} />
```

```
<cfmail attributecollection="#mailAttrs#">  
  Test message  
</cfmail>
```

- May see some web references to arguments or argumentscollection attribute
- <http://www.forta.com/blog/index.cfm/2007/4/29/Using-Scorpio-ArgumentsCollection>
- <http://www.bennadel.com/blog/755-Learning-ColdFusion-8-Defining-Tags-With-AttributeCollection.htm>

Various Coding Gems (cont.)

- Per Application Settings
 - Set in Application.cfc
 - Each application can have its own mappings, custom tag paths
 - Note that this feature can be enabled/disabled in Admin (enabled by default)
 - <http://www.forta.com/blog/index.cfm/2007/4/24/Scorpio-Per-Application-Settings>

Various Coding Gems (cont.)

- Per-application missing template handler
 - OnMissingTemplate method
 - Invoked when ColdFusion encounters a file not found condition
 - Requests for CF files (.cfm, .cfc, etc.)
 - Definable as method in Application.cfc
 - as opposed to server-wide
- See related Application.cfc welcomefilelist variable
 - Though relates only to use of built-in CF web server
 - <http://ray.camdenfamily.com/index.cfm/2007/5/31/ColdFusion-8-Handling-missing-CFM-files>

Various Coding Gems (cont.)

- Reduced whitespace generated for some CFML code
 - When whitespace suppression is enabled
 - Especially within CFCs (including `Application.cfc`)

CFDUMP enhancements

- Now provides greater control over what's shown in a dump
- Can indicate which columns of query (or keys in struct) to display:
 - Show/hide attribute accepts column/key list
 - Examples:

```
<cfdump var="#aquery#" show="colA,colB">
<cfdump var="#aquery#" hide="colX,colY">
<cfdump var="#astruct#" show="keyA,keyB">
<cfdump var="#astruct#" hide="keyX,keyY">
```
- And how many keys of struct to display:
 - `<cfdump var="#astruct#" keys="4">`
- And whether or not to list UDFs (`showUDFs=yes|no`)
- <http://ray.camdenfamily.com/index.cfm/2007/6/1/ColdFusion-8-Dumping-gets-even-better>
- ...

CFDUMP enhancements (cont)

- And whether to show output to browser, console, or a file
 - OUTPUT=browser|console|*filename*
 - Defaults to browser
 - Console will be log file if CF running as service, or command line where CF is started
 - Though, see <http://blog.mrbuzzy.biz/?p=8>
 - Filename should be absolute, or relative to CF Temp dir (see `getTempDirectory()` for location)
- Dump of query shows a little more data
 - Whether it was cached, the execution time, the SQL, and any queryparms
 - Want to see that in code? Use CF 7's RESULT attribute
 - <http://www.coldfusionjedi.com/index.cfm/2007/6/4/ColdFusion-8-Dumping-a-Query-in-ColdFusion-8>

Clearing template cache no longer an “all or nothing” proposition

- Template cache template removal function in the Admin API since 7
 - `cfide.adminapi.runtime.cleartrustedcache()`
 - Really a misnomer: clears template cache
 - There is no “trusted cache”: that’s a behavior option to not look on disk for files once they’re loaded into CF memory (the cache)
- Added to enable flushing template cache when trusted cache was used, and temporarily disabled for new code
 - But it cleared the entire template cache

Clearing template cache no longer an “all or nothing” proposition (cont.)

- Function now takes an optional templateList argument
 - comma separated list containing the template paths to be deleted from template cache, template path(s) should be full physical path
 - So now can use it to clear just the files changed when needed
 - No need to disable the trusted cache feature, either
- <http://www.coldfusionjedi.com/index.cfm/2007/6/7/ColdFusion-8-Admin-API-and-Trusted-Cache>
- <http://www.coldfusionjedi.com/index.cfm/2007/6/7/ColdFusion-8-Admin-API-and-Trusted-Cache>

Query-related Gems

Various Query-related Gems

- Query Caching enhancements
 - Can now use cfqueryparam within a cached CFQUERY
 - Until 8, if you used CachedWithin or CachedAfter, could not use CFQUERYPARAM
 - Can finally use CachedWithin/After with CFSTOREDPROC
- CFPROC PARAM DBVARNAME supported again
 - Had been removed after CF5
- Auto-Generated key retrieval on insert, via CFQUERY RESULTS struct
 - SQL Server: IDENTITYCOL
 - MySQL: GENERATED_KEY
 - Sybase: SYB_IDENTITY
 - Informix: SERIAL_COL
 - Oracle: ROWID (id of inserted row, to retrieve rows based on this ID)
 - <http://www.forta.com/blog/index.cfm/2007/7/6/ColdFusion-8-Can-Return-Identity-Values>

Various Query-related Gems (cont.)

- CFDBINFO lets you get information about data sources, including database names, tables, columns, stored procedures, indexes, primary & foreign keys, driver version

```
<cfdbinfo type="tables" datasource="exampleapps"
  name="tables">
<cfdump var="#tables#">
```

```
<cfdbinfo type="columns" datasource="exampleapps"
  table="employees" name="columns">
<cfdump var="#columns#">
```

- <http://www.forta.com/blog/index.cfm/2007/5/15/Scorpio-Makes-Obtaining-Database-And-Table-Info-Easy>

Various Query-related Gems (cont.)

- Apache Derby database embedded
 - Embedded, cross-platform
 - <http://www.forta.com/blog/index.cfm/2007/5/28/Scorpio-And-Apache-Derby>
 - <http://www.forta.com/blog/index.cfm/2007/5/29/More-On-Scorpio-And-Apache-Derby>
 - http://steve.coldfusionjournal.com/using_the_derby_database.htm
- Transaction Save points
 - CFTRANSACTION action="savepoint"
 - lets you roll back portions of a transaction
 - Example:
http://livedocs.adobe.com/coldfusion/8/htmldocs/help.html?content=Tags_t_09.html

CFC Gems

Component metadata without instantiation

- CFMX 6's GetMetadata can get a component's properties
 - But you must instantiate it first
- CF 8's GetComponentMetaData instead gets it without instantiating it

- Example:

```
<cfset meta =  
    GetComponentMetaData("CFIDE.adminapi.runtime")>  
<cfdump var="#meta#">
```

- <http://www.danvega.org/blog/index.cfm/2007/6/5/Scorpio-Functions-GetComponentMetaData>

Various CFC Gems

- OnMissingMethod method
 - lets you handle calls to methods that are not implemented in the CFC
 - definable in any CFC
 - Handle error in CFC itself rather than in calling code
 - http://corfield.org/entry/Another_Scorpio_gem

Various CFC Gems (cont.)

- CFFUNCTION has new ReturnFormat attribute
 - Type of data returned to a remote caller (plain, wddx, json)
 - No effect on format returned to local callers
 - <http://www.coldfusionjedi.com/index.cfm/2007/7/5/ColdFusion-8--Return-Format-for-ColdFusion-Components>
- CFARGUMENT Type and CFFUNCTION ReturnType now accept "component"
 - In addition to long accepting a specific component name
- CFC Interfaces via CFINTERFACE
- IsInstanceOf() – test if a variable holds an instance of a CFC, interface, or java class
 - <http://www.derekperez.com/blog/?p=107>

Various CFC Gems (cont.)

- Ability to refresh Web Service proxy for called web services, from CFINVOKE/CFOBJECT
 - RefreshWSDL attribute (yes/no)
 - Can now force CF to refresh the WSDL/proxy stub on the call to the web service
 - wsdl2javaArgs
 - list of arguments to pass to the WSDL2Java tool that generates Java stubs for the web service
 - Can refresh in 6 and 7 too
 - http://carehart.org/blog/client/index.cfm/2006/12/12/refreshing_web_services_programmatically
- CFC serialization and ability to duplicate
 - Primarily for use with J2EE session clustering
 - Not everyone's a fan
 - http://corfield.org/blog/index.cfm/do/blog.entry/entry/duplicate_is_bad_for_your_objects_health

Miscellaneous Gems

Miscellaneous Tag Enhancements

- CFDIRECTORY has some new attributes
 - Listinfo="name|all"
 - Whether to return name of file, or all other usual data
 - Can make a substantial performance difference
 - Type="file|dir|all"
 - Return only files or directories or both (default)
- CFMAIL Priority attribute
 - <http://www.brooks-bilson.com/blogs/rob/index.cfm/2007/6/12/New-Priority-Attribute--for-CFMAIL-in-ColdFusion-8Scorpio>
- CFLOCATION now permits you to use 301 statuscode
 - <http://www.coldfusionjedi.com/index.cfm/2007/6/7/Automatically-pushing-to-a-new-URL-and-how-ColdFusion-8-makes-this-a-bit-simpler>
- CFCONTENT change
 - <http://www.coldfusionjedi.com/index.cfm/2007/7/16/Interesting-change-to-CFCONTENT-in-Scorpio>

Miscellaneous Tag Enhancements (cont.)

- CFSCCHEDULE Action attribute has new PAUSE value, to pause a specified task
 - Admin also supports this
 - <http://www.coldfusionjedi.com/index.cfm/2007/6/28/ColdFusion-8-Pausing-Scheduled-Tasks>
- Change in behavior of CFLOOP QUERY nested within another
 - <http://www.bennadel.com/index.cfm?dax=blog:763.view>
- CFHTTP has new ClientCert attribute
- CFFTP supports Secure FTP (SFTP)
- CFLOCK has new Request option for Scope

Miscellaneous Tag Enhancements (cont.)

- CFDOCUMENT enhancements
 - dynamic CFML and pagecount evaluation of heard/footers, proxy and SSL support, bug fixes, bookmarks, performance, PDF Form support, etc
 - saveAsName – lets you specify name if user saves file
 - meaning they browse the page and file file>save as
 - otherwise, would save as name of the cfm file
 - New totalsectionpagecount and currentsectionpagenumber scope variables
 - New localUrl attribute, when using relative paths meant to point to files local to the server
 - <http://coldfused.blogspot.com/2007/07/enhancements-to-cfdocument-in.html>
 - http://livedocs.adobe.com/coldfusion/8/htmldocs/Tags_d-e_05.html#4018088
 - <http://www.chapter31.com/2007/08/16/localurl-attribute-added-to-cfdocument-in-coldfusion-8/>

Miscellaneous New Tags You Might Have Missed

- CFZIP
 - ZIP compressed files into an archive file
 - UNZIP extracts files from an archive file
 - LIST lists the contents of an archive file
 - DELETE deletes one or more files from an archive file
 - READ reads the contents of an archived file into a variable
 - READBINARY reads the contents of a binary archived file into a variable
 - <http://www.forta.com/blog/index.cfm/2007/5/22/ZIP-And-JAR-File-Access-In-Scorpio>

Miscellaneous New Tags You Might Have Missed (cont.)

● CFTHREAD

- <http://www.forta.com/blog/index.cfm/2007/5/21/MultiThreaded-Application-Development-In-Scorpio>
- <http://www.bennadel.com/blog/743-Learning-ColdFusion-8-CFThread-Part-I-Data-Exchange.htm>
- <http://www.bennadel.com/blog/755-Learning-ColdFusion-8-Defining-Tags-With-AttributeCollection.htm>
- <http://www.bennadel.com/blog/749-Learning-ColdFusion-8-CFThread-Part-II-Parallel-Threads.htm>
- <http://www.bennadel.com/blog/750-Learning-ColdFusion-8-CFThread-Part-III-Set-It-And-Forget-It.htm>
- <http://www.bennadel.com/blog/752-Learning-ColdFusion-8-CFThread-Part-IV-Cross-Page-Thread-References.htm>

Miscellaneous New Tags You Might Have Missed (cont.)

- CFPRINT
 - Send PDFs to printer accessible to CF Server
 - Whether static, or created by CFDOCUMENT, CFPDF, CFReport, etc.
 - <http://www.forta.com/blog/index.cfm/2007/5/31/Server-Side-Printing-In-ColdFusion-8>
- CFFEED
 - Read and write RSS and ATOM feeds
 - http://livedocs.adobe.com/coldfusion/8/htmldocs/help.html?content=Tags_f_01.html
- CFPRESENTATION to create adobe connect presentations on the fly
 - http://livedocs.adobe.com/coldfusion/8/htmldocs/help.html?content=Tags_p-q_09.html
 - <http://www.adobe.com/software/coldfusion/demos/presentation/>
- Again, many other new tags not mentioned

Miscellaneous Function Enhancements

- Locale-specific functions have new locale argument
- New encryption functionality

Miscellaneous New Functions

- New Sleep() – pause a request for x seconds
 - http://carehart.org/blog/client/index.cfm/2007/6/15/cf8_hidden_gem_sleep_function
- New REMatch, REMatchNoCase functions
 - <http://www.forta.com/blog/index.cfm/2007/5/4/Scorpio-Adds-Two-New-Regex-Functions>
- Arbitrary precision decimal handling with PrecisionEvaluate()
- New security functions
 - GetUserRoles, IsUserInAnyRole, IsUserLoggedIn
- 14 new file I/O functions
 - <http://www.forta.com/blog/index.cfm/2007/5/11/Scorpio-File-IO-Enhancements>
 - <http://ray.camdenfamily.com/index.cfm/2007/6/5/ColdFusion-8-New-Looping-Constructs>

Miscellaneous New Functions (cont.)

- New functions mentioned previously/later
 - ArrayIsDefined
 - GetComponentMetaData
 - IsInstanceOf
 - QueryConvertForGrid
- Dozens of other new functions related to
 - Ajax
 - PDF
 - Images
 - .Net objects
 - CFPRINT

Miscellaneous Other Gems

- Multiple user accounts in the CF Admin and for RDS
 - can have fine-grained control over who has access to what
 - also, RDS sandboxing
 - so each different RDS user has access to just selected parts of the file system or just selected datasources
 - <http://www.forta.com/blog/index.cfm/2007/5/8/Scorpio-Features-Greater-Control-Over-Administrator-And-RDS-Security>
- CF8 includes free (somewhat limited) license of LiveCycle Data Services
 - <http://www.adobe.com/products/coldfusion/flex2/>

Miscellaneous Other Gems (cont.)

- Improved report builder
 - reporting server and Builder enhancements including passing Queries to subreports, HTML output, CFREPORTPARAM, and CSS/Style support, etc
- Ability to generate Flex/SWF within CFML page
 - <http://samfarmer.instantspot.com/blog/index.cfm/2007/7/20/ColdFusion-8-and-its-Cool-Ability-to-Compile-Flex-Applications>
- New means to extend the CF Admin menus
 - http://livedocs.adobe.com/coldfusion/8/htmldocs/help.html?content=basicconfig_36.html
 - <http://www.coldfusionjedi.com/index.cfm/2007/6/28/Modifying-the-ColdFusion-8-Administrator-Menu>

Performance Gems

- General performance improvements
 - http://www.adobe.com/products/coldfusion/pdfs/cf8_performancebrief.pdf
- CF now deployed atop JDK 1.6
 - fixes some past problems, adds some new features
 - adds substantial performance increases
- Dramatic improvement in CFC instance creation
 - <http://www.harrisfamily.net.nz/devblog/index.cfm/2007/7/3/WHY-is-CF8-so-quick>
- Dramatic change in File Upload (CFFILE Action="upload")
 - Files much larger than 300-400 meg would cripple CF7 and below, because loaded into memory for gethttprequestdata
 - No longer does this (load them into memory)
 - <http://coldfused.blogspot.com/2007/08/coldfusion-8-changes-with-file-upload.html>

Performance Gems (cont.)

- Adobe Observations of CF8 over CF7
 - Most applications average 30-40% performance gain
 - some applications 3 or 4 times better
 - Structure manipulation in CF 8 twice as fast as CF 7
 - List manipulation three times faster
 - CFSET more than four times faster
 - CFPARAM tag 35 times faster
 - Date functions about 6 times as fast
 - Regular expression functions more than twice as fast
 - CFC instantiation over 20 times faster
 - http://www.adobe.com/devnet/coldfusion/articles/whatsnew_cf8.html

Editor Gems

- Eclipse plug-ins
 - Adding Ajax Application Generation Wizard, Log Viewer, CF Debugger, CF8 help
 - to previous RDS support, query viewer, services browser, Flex/CRUD/CFC/AS wizards
 - <http://www.adobe.com/support/coldfusion/downloads.html#cfdevtools>
 - Update since release for query viewer on Eclipse 3.3
 - <http://www.cfreport.org/index.cfm/2007/8/17/Eclipse-33-and-the-ColdFusion-Extensions-for-Eclipse>
 - <http://www.forta.com/blog/index.cfm/2007/5/30/Installing-ColdFusion-8-Eclipse-Extensions>
 - <http://ray.camdenfamily.com/index.cfm/2007/5/30/ColdFusion-8-Log-Viewer-added-to-Eclipse-Plugins>

Editor Gems (cont.)

- CF8 support for DreamWeaver, HomeSite+/CF Studio (tag insight, editors, help)
 - Available on the download page with CF8
 - <http://www.adobe.com/support/coldfusion/downloads.html#cfdevtools>
- CFEclipse CF8 tag updates coming:
 - <http://www.markdrew.co.uk/blog/index.cfm/2007/6/7/CF8-Syntax-Dictionaries-for-CFEclipse>
- But Adobe is offering Help files for Eclipse, on previous page
- What's the difference between Adobe Eclipse Plugins & CFEclipse
 - <http://www.andyjarrett.co.uk/andy/blog/index.cfm/2007/8/20/Difference-between-CFEclipse-and-CF-Extensions>

Editor Gems (cont.)

- Interactive Step Debugger
 - <http://www.adobe.com/products/coldfusion/features/debugger/>
 - <http://www.forta.com/blog/index.cfm/2007/5/30/CF8-Debugger-Getting-Started>
 - Note, though, it works only with 8
 - On CF6, 7, or 8, consider FusionDebug (fusiondebug.com)

Gems related to Ajax features

- CFGRID
 - Don't miss the compelling new HTML-based grid (no java, flash)
- CFAjaxProxy
 - 2 purposes (mutually exclusive attributes)
 - Cfc - invoke cfc methods from js/ajax (even non-CF ajax UIs)
 - Bind – bind cfc, url, js function to
- CFWINDOW – open modal window within current window (not a “popup”)
 - <http://www.danvega.org/blog/index.cfm/2007/6/1/Tip-of-The-Day-using-CFWindow>
 - <http://www.coldfusionjedi.com/index.cfm/2007/6/20/ColdFusion-8-AJAX-UI-Windows>
 - <http://www.coldfusionjedi.com/index.cfm/2007/5/31/ColdFusion-8-Demo-of-CFGRID-Ajax-binding-and-CFWINDOW>

Gems related to Ajax features (cont.)

- Don't miss as well CFDIV, CFLAYOUT, CFPOD, and more
 - And features to update only a portion of a page
 - No full screen refresh
- May have heard of CFINPUT Type="autosuggest"
 - How about using CFSELECT to create dueling select lists (aka "2 selects related")
 - <http://www.forta.com/blog/index.cfm/2007/5/31/ColdFusion-Ajax-Tutorial-2-Related-Selects>
- Note that Ajax features can call either CFML or CFC pages
 - And lots more
- Ajax features include option to generate debugging window
 - Add cfdebug=true on querystring (and enable in Admin)
 - <http://www.madfellas.com/blog/index.cfm/2007/6/3/ColdFusion-8-Ajax-Logger>

Gems related to PDF features

- Features of CFPDF you may not noticed
 - Can merge several PDF documents (or parts) into one
 - <http://www.coldfusionjedi.com/index.cfm/2007/7/17/ColdFusion-8-Working-with-PDFs-Part-5>
 - Can merge from memory, or from filesystem
 - Can point to a directory to find files to merge
 - will sort by timestamp first, can change order to something else, like name
 - will sort in reverse order (made sense for date), so if you use name, will be sorted Z to A
 - Can change using ascending="yes"
 - will try to merge every file in a folder
 - If folder contains non-PDF files, will ignore them unless you use stopOnError=true
 - Note available CFPDFPARAM to give more merge control

Gems related to PDF features (cont.)

- Features of CFPDF you may not noticed (cont.)
 - Read a PDF into memory for further manipulation
 - Delete pages
 - “Linearize” (during write) for faster web display
 - “Flatten” or remove interactivity from forms created in Acrobat
 - Encrypt and add password protection
 - Supports AES_128, RC4_128M, RC4_128, and RC4_40
 - Get/set metadata
 - Write (after reading in, merging, manipulating, etc. as above)
 - ...

Gems related to PDF features (cont.)

- Features of CFPDF you may not noticed (cont.)
 - Generate thumbnail images from PDFs as JPG/PNG/TIFF
 - And can create a PDF from a URL with CFDOCUMENT
 - So can use this to create “site snapshots”
 - <http://www.coldfusionjedi.com/index.cfm/2007/6/13/ColdFusion-8-URL-Thumbnails>
 - Add/remove watermarks
 - <http://www.coldfusionjedi.com/index.cfm/2007/7/13/ColdFusion-8-Working-with-PDFs-Part-3>
 - Can be in background or foreground
 - Can be made to show up on screen and not in print
- Can use relative paths for SOURCE/DESTINATION for PDF actions
 - no need to use ExpandPath() function to get absolute filesystem path

Gems Within Other New Features

- Server Monitor

- Powerful, and useful for not just production but development
 - And while not included in Standard, is in Developer edition
- http://www.adobe.com/products/coldfusion/features/server_monitoring/
- Note: many features available at zero cost (no overhead)
 - i.e., some don't require enabling any of the 3 "start" buttons
 - http://carehart.org/blog/client/index.cfm/2007/6/15/cf8_hiddengem_monitoring_incredibleinfo

- Admin API changes

- new accessmanager.cfc
- new servermonitoring.cfc
 - functions of Server Monitor accessible via Admin API
 - <http://www.coldfusionjedi.com/index.cfm/2007/6/14/ColdFusion-8-Server-Monitor-API>

Gems Within Other New Features (cont.)

- CFImage processing includes option to create captchas
- New cfthread scope for use within CFTHREAD code
 - <http://www.coldfusionjedi.com/index.cfm/2007/7/27/Using-the-CFTHREAD-Scope>
- New queryConvertForGrid function, use with CFGRID
 - <http://ray.camdenfamily.com/index.cfm/2007/6/1/ColdFusion-8-QueryConvertForGrid>

Admin Console Gems

- New “Request Tuning” section
 - “Maximum number of simultaneous requests” moved to here
 - Also new throttles for different kinds of requests
 - flash remoting, web services, cfc methods (called from http), report threads, cfthread threads
 - New request queue timeout feature
 - Optional page to show users on timeout
 - New max running and queued jrun threads

Admin Console Gems (cont.)

- New options on "Settings" page
 - "Enable per app settings"
 - "Disable CFC Type Check"
 - Turns off verifying the CFC type when calling methods with CFCs as arguments, disables verifying an object that implements the right interface
 - Useful for performance
 - "Disable access to internal ColdFusion Java components"
 - "Watch configuration files for changes" every x seconds
 - Primarily for WebSphere ND deployment
 - "Enable Global Script Protection"
 - Protects Form, URL, CGI, and Cookie scope variables from cross-site scripting attacks

Admin Console Gems (cont.)

- New Mail security options
 - Separate field for username/password for SMTP server
 - "Enable SSL socket connections to mail server"
 - "Enable TLS connection to mail server"
 - Needed for gmail servers, apparently
 - <http://tafug.org/blog/index.cfm/2007/5/30/ColdFusion-8-likes-Google-Apps>
- New mail server connection timeout
- New event gateways
 - DataManagement, DataServicesMessaging, FlexMessaging
- New "Debugger Settings" page (for interactive debugger)
- New "User Manager" page in security section
 - User-specific Admin or RDS access
- I list and discuss all the changes in the CF8 Admin at
 - http://carehart.org/blog/client/index.cfm/2007/7/3/cf8_admin_in_changes

Doc Change Gems

- See CFML Ref section
 - "Tag changes since ColdFusion 5" to view what was added in CF8, and 7 and point releases
- New chapter in CFML Ref:
 - Chapter 5: AJAX JavaScript Functions
- Developer's Guide
 - 16: Using ColdFusion Threads
 - 20: Using the ColdFusion Debugger
 - 33: Using AJAX UI Components and Features
 - 34: Using AJAX Data and Development Features
 - 36: Using Flash Remoting Update
 - 37: Using the LiveCycle Data Services ES Assembler
 - 39: Manipulating PDF Forms in ColdFusion
 - 40: Assembling PDF Documents
 - 41: Creating and Manipulating ColdFusion Images
 - 43: Creating Reports and Documents for Printing
 - 44: Creating Reports with Report Builder
 - 45: Creating Slide Presentations
 - 49: Using Microsoft .NET Assemblies
 - 52: Interacting with Microsoft Exchange Servers
 - 58: Using the FMS event gateway
 - 59: Using the Flex Messaging Event Gateway
 - 60: Using the LiveCycle Data Services Event Gateway
 - 62: Using the ColdFusion Extensions for Eclipse

Platform Support

- JDK 1.6 support
- Support for JBoss, Intel Mac, Windows Vista
- 64-bit Solaris support
- Built-in support for Mysql 4/5
 - <http://ray.camdenfamily.com/index.cfm/2007/6/2/ColdFusion-8-Built-in-Support-for-MySQL-45>
- PostgreSQL 8.x support
 - Now ships the org.postgresql.Driver and provides admin configuration
- DataDirect 3.6 JDBC DB driver updates
- http://www.adobe.com/products/coldfusion/pdfs/cf8_systemsupportmatrix.pdf

Enterprise vs Standard (and Dev)

- Some new features are only in Enterprise (or Developer edition)
 - Performance Monitor and its Admin API features
 - Multiple user accounts in the CF Admin and for RDS
 - 64-bit support
- But some features formerly in Enterprise only are now available in Std
 - Enabled via EFR (Enterprise Feature Router), which queues requests using these to run only one at a time
 - Goal is that any CFML app should run on any edition
 - Will limit them to just one thread
 - CF7 features: Event gateways, Reporting
 - CF8 features: PDF stuff, Server-side printing, On-demand presentations, Exchange features, etc.
 - CFTHREAD is limited to two spawned threads
- Source:
http://www.adobe.com/products/coldfusion/pdfs/cf8_featurecomp.pdf

Learning More

- CF8 product page
 - Lots of resources
 - <http://www.adobe.com/products/coldfusion/>
- CF8 features page
 - Lots of useful info, sometime whole pages on a topic
 - <http://www.adobe.com/products/coldfusion/features/>
- CF8 Docs
 - <http://www.adobe.com/support/documentation/en/coldfusion/>
- CF8 Getting Started and Demos
 - <http://www.adobe.com/products/coldfusion/demos/>
 - http://examples.adobe.com/cf8gettingstarted/experience/index_content.cfm
 - Code snippet explorer
 - <http://examples.adobe.com/cf8gettingstarted/experience/snippets.cfm>

Learning More (cont.)

- Popular bloggers covering CF8 a lot
 - Forta.com
 - ColdFusionJedi.com (ray.camdenfamily.com)
 - BenNadel.com
 - Others
- CF8 forums
 - Adobe CF8 forum
 - <http://www.adobe.com/cfusion/webforums/forum/categories.cfm?forumid=72&catid=648&entercat=y>
 - HouseofFusion CF8 list
 - <http://www.houseoffusion.com/groups/coldfusion8/>

Summary

- Did you learn anything new? 😊
- We covered a wide range of hidden gems
 - Coding Gems
 - Query-related Gems
 - CFC Gems
 - Miscellaneous Tag Enhancements
 - Miscellaneous New Tags You Might Have Missed
 - Miscellaneous Function Enhancements
 - Performance Gems
 - Editor Gems
 - Gems Related to Ajax Features, PDF Features
 - Gems Within Other New Features
 - Other New Things to Investigate
 - Admin Console Gems
 - Doc Change Gems
 - Platform Support
 - Enterprise vs Standard
 - Resources for Learning More
- Not even all that's in CF8

Questions On Presentation

- Charlie Arehart
 - charlie@carehart.org
- I'd really appreciate your feedback
 - <http://carehart.org/feedback/>
- Also available for troubleshooting, training, consulting
 - Also other developer productivity coaching, system admin and tuning support, and more
 - Remote or on-site
- New Per-minute Phone/Web support
 - <http://carehart.org/askcharlie/>