INTRODUCTION

• NOT discussing ALL that is new/updated in CF11!
  • Only the things that don’t get much PR

• Adobe always lists a dozen or so key features
  • There’s often a LOT more

• Some may have been documented, but you may miss them
  • No single document listing all new release changes. In many docs

• These slides are online at my site
ABOUT CHARLIE AREHART

Independent Consultant
- 17 yrs CF experience (32 in Enterprise IT)
- Certified Adv CF Developer, Instructor
- Adobe Forum MVP, CF CAB member
- Frequent speaker to conf’s worldwide
- Organizer, Online ColdFusion Meetup (coldfusionmeetup.com), 2800+ members
- Living in Alpharetta, Georgia (Atlanta)

Web home at www.carehart.org
- 100+ presentations, 80+ articles, 400+ blog entries
- UGTV: recordings of 600+ presos by 300+ speakers
- CF411.com: 1800+ tools/resources, 150+ categories
- CF911.com: CF server troubleshooting resources
- Hosting courtesy of EdgeWeb Hosting
- Consulting: available for CF troubleshooting, tuning
  - Remote or on-site; on-demand, single instance is ok
HOW MANY NEW/CHANGED FEATURES?

• Some people think CF didn’t really add much
• So how many new features do you think can be named?
  • I don’t mean counting every new/changed tag/function, but “features”
  • Try to list them right now..
• Hope to show you there is lots more to CF11 than you may think
  • Won’t simply praise it. Will also point out some gotchas/traps/solutions
• Will also talk briefly about CFBuilder 3 and some hidden gems/tips/traps
• One other tip, if you’re skipping 10
  • Don’t miss my “Hidden Gems in CF10” and “CFB 2” and “CFB 1” talks
  • At “presentations” section of carehart.org
DON’T MISS THE DOCS

• Online at https://wikidocs.adobe.com/wiki/display/coldfusionen/
  • Adobe ColdFusion CFML Reference (3053 pp.)
  • Developing Adobe ColdFusion Applications (2080 pp.)
  • Installing Adobe ColdFusion (93 pp.)
  • Configuring and Administering ColdFusion (215 pp.)
  • (New) Mobile Application Development (72 pp.)

• Any guess of how many pages are in these docs?

• Yes, you can get PDF of each:
  https://wikidocs.adobe.com/wiki/display/coldfusionen/Downloads
MANY MORE RESOURCES ON WHAT’S NEW

- First chapter of CFML Ref and Dev Apps list “what’s new/changed in 11”
- wikidocs.adobe.com/wiki/display/coldfusionen/New+in+ColdFusion
  - “New and Changed Tags/Functions in ColdFusion 11”
- helpx.adobe.com/coldfusion/release-note/coldfusion-11-release-notes.html
- wikidocs.adobe.com/wiki/display/coldfusionen/ColdFusion+Language+Enhancements
- www.adobe.com/devnet/coldfusion/articles/language-enhancements.html
- And more
INSTALLATION CHANGES

• New dev/production/prod+secure profile option
  • Secure profile added in CF11
    • Changes about 20 CF admin settings
    • Can now enable/disable later in Admin, all at once
  • Production profile: disables RDS, enforces complex passwords, provides later screen to disable some features (flash remoting, rds, wsrp, etc)
• New option to expose pdfg/solr as a remote service
NEW “EXPRESS” EDITION

- AKA "getting started server"
  - Available as zip or EAR
  - Install instructions: https://wikidocs.adobe.com/wiki/display/coldfusionen/Installing+the+ColdFusion+Express

- Not intended for prod
  - All debugging settings are enabled
  - Development profile is enabled by default
  - Applying License is also disabled from the administrator to prevent use in production
  - Does not support:
    - SOLR
    - Microsoft .NET integration
    - Remote administration
    - PDF generation
    - Can configured with this server by installing standalone installers:
      - adobe.com/support/coldfusion/downloads.html
ADMIN ENHANCEMENTS

• Lots of “little” things that can make a big difference
• Can now have more than one login to Admin at same time
  • Configurable in admin Security page
  • Also Admin API: setAllowConcurrentAdminLogin, isAllowConcurrentAdminLogin
• Secure profile page
  • Can turn on/off
  • Shows the ~20 admin settings affected, 3 cols of what is, would be, was
• Security>Allowed IP Addresses page
  • This affects more than just access to CF Admin (added in CF10)
  • Also adminapi, servermanager, wizards, RDS, and more
  • See new iprestriction.properties file in C:\ColdFusion11\config\wsconfig\nn
SECURITY ENHANCEMENTS

- Secure Profile change
  - If enabled, default value for cflocation tag addToken attribute will be false
  - New adminapi methods: enableSecureProfile, disableSecureProfile, getAllSecureProfileSettingsInArray

- Antisamy
  - New isSafeHTML, getSafeHTML functions use antisamy policy file

- Oauth support (new functions, later)

- New Generatepbkdf2key function
  - “derive a cryptographically strong random key of any desired size from the humanly manageable password or passphrase”

- CFMail support of encrypted email

- JVM included with CF11 is 1.7.0_55 (you can update to more recent)

- …
SECURITY ENHANCEMENTS (CONT.)

- CFHTTP now supports calling pages secured with Windows Auth/NTLM
  - New authType=“ntlm” attribute
  - Also now supports server name indication (SNI) extension for TLS
- New encoding support for XML, XPATH processing
  - Also new encodeForXMLAttribute function
- CFLogin change regarding multiple concurrent users
  - Admin change really about this
  - As for apps, new allowConcurrent on CFLogin; session attr on CFLogout
- CFInclude change
  - Can now limit what file extensions can be CFINCLUDEd
  - Can set in CF admin or in application.cfc/cfm
- Again, for more on these and others, see
  - adobe.com/devnet/coldfusion/articles/security-improvements-cf11.html
LANGUAGE ENHANCEMENTS: NEW TAGS

- Again, see list of new/modified tags and functions here:
  - wikidocs.adobe.com/wiki/pages/viewpage.action?pageId=140968014
- Cfclient
  - Cfclientsettings
- Cfhtmltopdf (no longer Windows-only)
  - Cfhtmltopdfitem
- Cfimapfilter
- Cfoauth
- Cf_socialplugin
LANGUAGE ENHANCEMENTS: NEW FUNCTIONS

- ArrayMap
- ArrayReduce
- CanDeSerialize
- CanSerialize
- Serializable
- DeserializeXML
- EncodeForXMLAttribute
- EncodeForXPath
- GeneratePBKDF2Key
- GetSafeHTML
- ImageGetMetadata
- InvalidateOAuthAccessToken
- InvokeCFClientFunction
- isSafeHTML
- IsValidOAuthAccessToken
- ListEach
- ListMap
- ListReduce
- QueryExecute
- QueryGetRow
- Serialize
- SerializeXML
- SpreadsheetAddAutofilter
- SpreadsheetAddPagebreaks
- StructMap
- StructReduce
LANGUAGE ENHANCEMENTS (CONT.)

- Other things
  - Member functions
  - Full cfscript parity with tags
  - Elvis operator
  - Built-in functions as first-class objects
- Again, see docs and what’s new pages for more
LANGUAGE ENHANCEMENTS (CONT.)

• Enterprise-only
  • PDF signature support
  • Full DDX support
  • WebSocket cluster support
  • REST multisite support
  • CFhtmltopdf cluster support
LANGUAGE ENHANCEMENTS (CONT.)

- New settings in application.cfc this scope or cfapplication attributes
  - datasources[] array (to support application-specific datasources)
  - strictNumberValidation (to change new default of stricter validation)
  - compileextforinclude (to control that CFINCLUDE change)
  - customSerializer (to support new REST custom serialization)
- For more, see https://wikidocs.adobe.com/wiki/display/coldfusionen/cfapplication
- Custom/"pluggable" serializers (for rest web services)
  - See wikidocs.adobe.com/wiki/display/coldfusionen/RESTful+Web+Services+in+ColdFusion
With CF11, Adobe has started to be more vigorous in really obsoleting what before was just deprecated

- Mostly old attributes, but some tags (cfgraph, cfervlet, etc.)
- And has now deprecated some more things

For more, see

- https://wikidocs.adobe.com/wiki/display/coldfusionen/Deprecated+Features
- http://cfmlblog.adamcameron.me/2014/03/coldfusion-11-adobe-have-finally.html
THINGS NOW SUPPORTED IN STANDARD!

- This is great news for many, as they used to be Enterprise only
- CF archive (car) mechanism (to move CF admin settings from server to server)
- Security Sandbox (to lockdown what code in different directories can do)
- Web socket limit lifted
- HTML5 charts
AGAIN, SOME NEW THINGS ARE ENTERPRISE ONLY

- PDF signature support
- Full DDX support
- WebSocket cluster support
- REST multisite support
- CFHTMLTOPDF cluster support

Edition differences:
- adobe.com/products/coldfusion-family/buying-guide.html
- adobe.com/products/coldfusion-enterprise/buying-guide.html
GOTCHAS

• Note that you must switch from using cfdocument to cfhtmltopdf, to get pixel-perfect PDFs
  • And note that cfhtmltopdf stops page processing (I found)
• “Minor” change in how cfhttp works, in terms of the request it makes
  • Adds port to hostname header reported to destination (which may be significant to some destinations, like google)
  • Can override it by writing your own host header with cfhtpparam
  • See raymondcamden.com/2014/5/22/Important-note-about-ColdFusion-11-and-CFHTTP
• CF10 had introduced new access log, tracking every request
  • Provided via Tomcat AccessValve
  • Sadly, it’s not enabled by default, but can be enabled in server.xml
BUGS

• Sadly, there are indeed bugs (as with any new software), and no update yet

• One particularly nasty one
  • In IIS (7 and 8?), if you change any IIS setting, the worker process/app pool of any sites associated with CF will stall until recycle of app pool. Ugh
  • Adobe has a fix, posted in bug report (3777189)

• For that and other bug fixes, you can email cfinstal@adobe.com to get patch

• Bugbase: bugbase.adobe.com/index.cfm
OTHER THINGS

- Note that support for CF9 will end in Dec 2014
- CF10 installers were removed, but of course it’s still supported
  - Issue was included libraries. Had to remove installers
- Can still find them, and most past CF installers, updates and docs
  - http://www.gpickin.com/cfrepo/
  - (Problem for now with tinyurl.com/cfdownloads)
- The Amazon instance has been updates for CF11
  - blogs.coldfusion.com/post.cfm/coldfusion-11-amis-now-available-on-amazon-ec2
- EULA: no major changes, but new clarification about VMs
CFBUILDER 3

- Rewritten entirely, no longer embedding Aptana
  - Most find it faster, better. Some encountering problems
  - New automatic update notification/implementation feature:
    - 3 updates so far: don’t miss getting that done
  - Configurable editor toolbar
  - Creates new index.cfm on creating new CF project (pro or con)
  - New “template” feature, available when creating a new CF project
- Now runs on Linux!
- ...

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CFBUILDER 3

- CFBuilder licenses now bundled with CF Server license purchase
  - Enterprise comes with 3 licenses of CF Builder
  - Standard comes with 1
- Builder also now includes option to bundle CF server within CFBuilder
  - Interesting option for those who wouldn’t notice free Dev edition
  - Also preconfigured in CFB as a “server”, helpful for those who might otherwise have missed how to do that
    - And the features that come only when a project is connected to a server
- Again, see available CFBuilder User Guide for more on CFB
NO CF11 UPDATES YET

• Should be one coming soon
• When there is one, if you’re new to CF10 and 11 and will run for first time, see
  • This blog entry from Adobe engineer Krishna P, with tips and traps
  • http://blogs.coldfusion.com/post.cfm/coldfusion-hotfix-installation-guide
  • Written after first update, and tweaked again after second update
  • Nearly 50 questions and answers!
MANY MORE “NEW” THINGS

• Again, this was not a list of “all that’s new” but seeming hidden gems
  • See docs for more on so many things
    • …
    • And so much more
  • Even more hidden gems, I’m sure
    • Are there any I’ve missed?
WHERE TO LEARN MORE

- Again, the Adobe CF Docs
  - So much more than just the CFML Reference
- Some Key Adobe CF Blogs:
  - http://blogs.coldfusion.com
    - Sometimes links to blogs of the CF engineers
- Others who have blogged quite a bit about CF11
  - http://blog.adamcameron.me/
  - http://www.raymondcamden.com
  - http://www.bennadel.com/
- See also Akbar Sait’s wonderful list of CFxx Tutorials
CONCLUSION

• Hope you agree that there’s a lot more than just a dozen or so new features
• How many do you think we covered?
  • Over 40!
• How many were valuable to you?
  • We’re done, so share your opinion by your applause, please! :-)
• Questions, if we have time?
  • And if I can help you with CF Server Troubleshooting, contact me below!