WHAT WAS NEW IN CF 10, 11, AND 2016 THAT YOU MAY HAVE MISSED?

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WHY ARE WE HERE?

- How many here in prod on CF2016? CF11? CF10? CF9? CF8 or earlier?
  - Do you know when 10 came out? Why it was a big deal?
- You may have skipped from CF9 or earlier to 10, 11, or 2016 (or 10 to 2016, etc.)
  - Or you may have moved to 10, 11, or 2016, but perhaps never took full advantage of it
- Goal here: broad-brush review of **key** things in 10, 11, 2016
  - Across several common categories, including features, compat, licensing, more
- Can't cover here EVERY change in each release, let alone demo them
  - See my hidden gems talk on each version
- Success: **everyone comes away learning several things that they want to try… or be aware of**
- Slides for this talk: carehart.org/presentations

ABOUT ME

- Been chronicling CF feature changes since …
  - CF 4 (CFDJ, Apr 99)
- Love to share info, with the community and my clients
  - Active blogger, speaker at nearly every CF conference the past 20 years
  - Contributor to/creator of many CF community resources
    - Online CFMeetup, CF411.com, UGTV, CF911.com, CFUpdate.com, and more
- My own focus is CF server troubleshooting, as an independent consultant
  - Assist organizations of all sizes, experience levels
  - Work remotely 99% of the time, safe, secure, easy (via shared desktop)
  - Focus is not just solving problems but educating you
  - Satisfaction guaranteed. More on rates, approach, etc at carehart.org/consulting

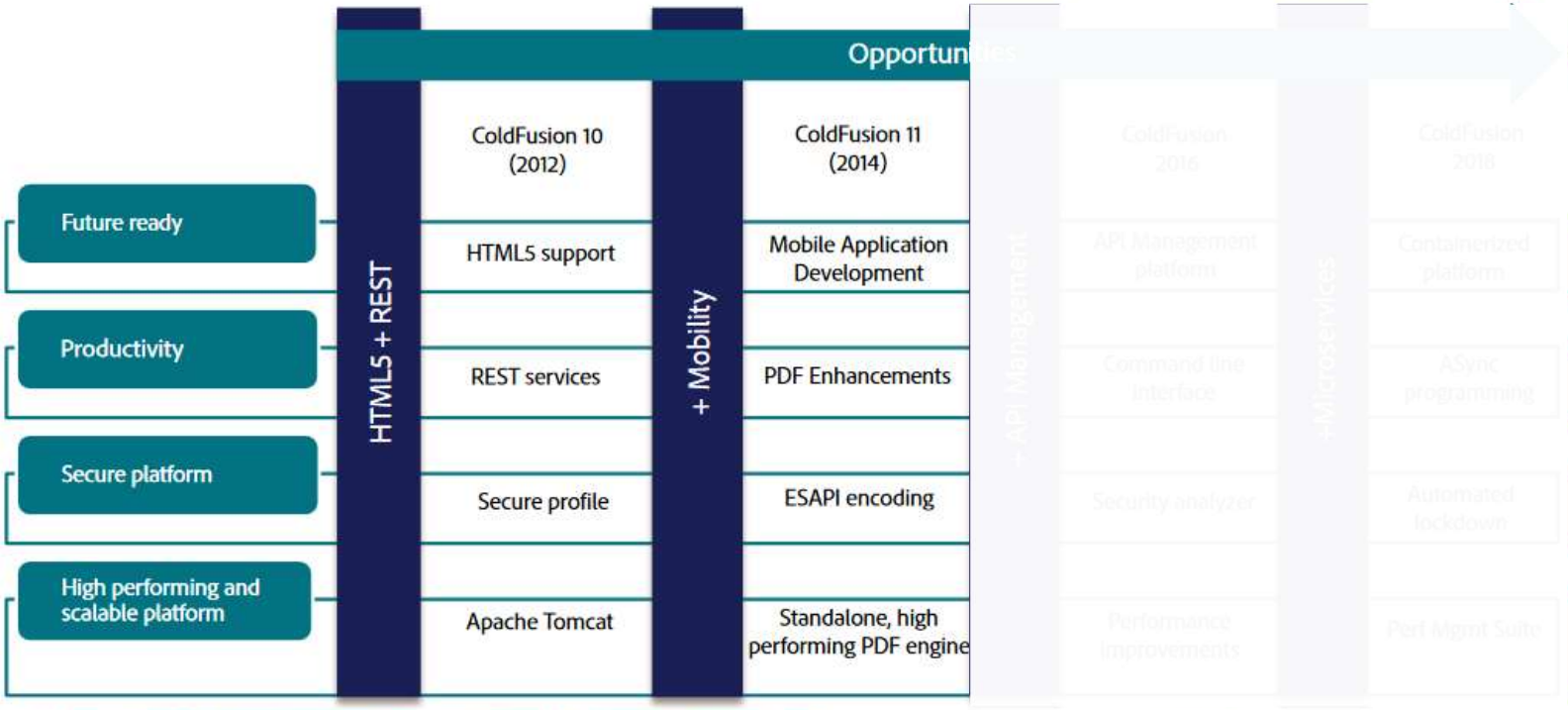
TOPICS FOR TODAY

- For each of CF10, 11, 2016:
  - Key major features
  - Key minor features, from coding to admin to security changes and more
  - Key changes introduced in **updates** to that release
  - About licensing changes
  - Compat issues / gotchas
  - Resources to learn more, again all the above for each release
    - While we can only briefly mention each new thing, there are docs, blog posts, articles, and/or videos on nearly every one

HOW ADOBE HAS HIGHLIGHTED THE 3 RELEASES

(FROM ADOBE ROADMAP 2017)

ColdFusion - Transformation over the years



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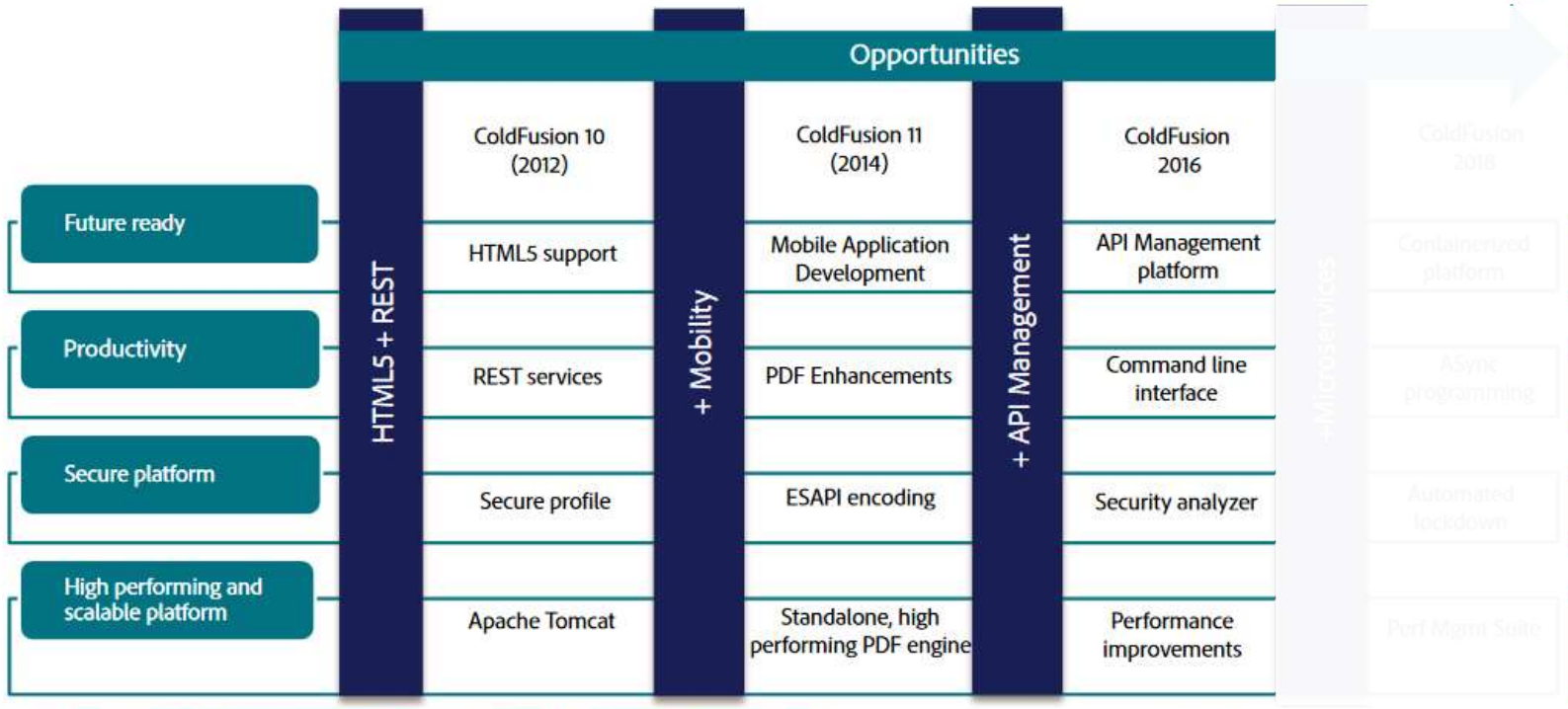
ColdFusion - Transformation over the years



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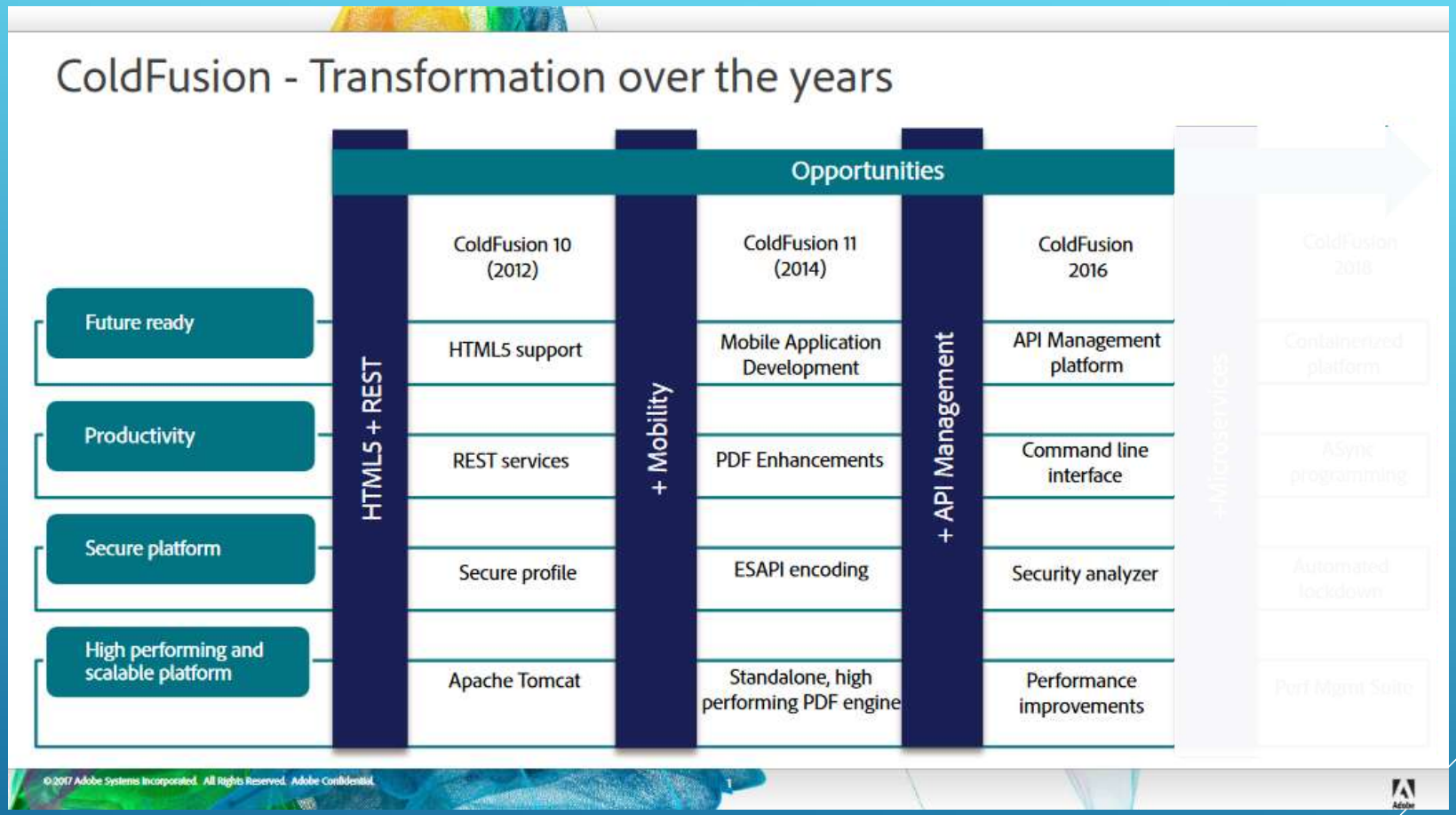

As always, there's LOTS more…

CF 10

CF10 KEY MAJOR FEATURES

- Changed from running on JRun to Tomcat
- Substantial increase in “tags as script”
- Many security and language enhancements (later here)
- Initial support for REST
- HTML5 charts and videos, geolocation support
- WebSockets
- Web services: AXIS 2, WSDL 2, SOAP 1.2, document literal wrapped support
- But also SO much more!

CF10 KEY MINOR FEATURES

- Implicit notation for arrays, structs
  - Option to use : separator for struct key assignment, as in var:value
- Implicit constructors for CFCs, implicit gettings/setters; method chaining
- Closures and inline functions
- Support for openauth: CFOauth (facebook, google, ms, github auth)
- Updated to embedded libraries (jvm, ehcache, solr, more)
- Amazon AMI

CF10 KEY SECURITY CHANGES

- "Secure Profile" feature (choice at installation only, in CF10)
- Many security enhancements regarding XSS, CSRF, Session Fixation, etc
  - New functions: encodefor*, decodefor*, csrf*, canonicalize, decodeFromURL, hmac
  - New sessioninvalidate and sessionrotate functions
- New "Session Cookie Settings" on "Memory Variables" page
- Verification of mime type
  - Via optional STRICT attribute on CFFILE uploads, or fileGetMimeType() on any file
- …

CF10 KEY SECURITY CHANGES (CONT.)

- Could now restrict Admin Access by IP Address (also asked during installer)
  - Security>Allowed IP Addresses (bottom of page)
- Could now disable creation of unnamed application scopes (Server Settings>Settings)
- CFPOP adds SECURE attribute for use of SSL/TLS
- In admin:
  - New "Maximum number of POST request parameters" (Server Settings>Settings)

CF10 KEY ADMIN CHANGES

- Automated hotfix mechanism
- Scheduled tasks: many improvements
  - Also, location within Admin from Debugging to Settings
- New directory structure for CF: base instance is "cfusion", as in c:\coldfusion10\cfusion
  - For Enterprise, Trial, developer editions, new instances created as sibling to that
  - And each instance has own jvm.config and "Java and JVM" admin page
- New audit.log tracks most changes made in CF Admin
- New Access log, tracking every request (disabled by default in CF11+)
- Still more, in terms of hidden gems…

CF10 KEY HIDDEN GEMS: INSTALL/ADMIN

- Old "out" log (from runtime/logs or jrun/logs) moved to main "logs" folder
- New password reset scripts (in instance's bin folder)
- New metrics logging feature (on "debugging output" page)
- New jQuery UI element for admin "browse" buttons
- Could now enable/disable RDS in Admin (versus knowing config file tweak)
- Scheduled tasks moved to Settings section (from Debugging & Logging)
- Several AdminAPI enhancements

CF10 KEY HIDDEN GEMS: LANGUAGE

- CFImage INTERPOLATION attribute to help performance of "resize" action
- CFStoredproc TIMEOUT attribute: time for each action within SP, not all
- New onAbort method for application.cfc (to handle CFAbort/abort)
- New datetimeformat (and lsdatetimeformat) function
- New getApplicationMetaData and sessionGetMetaData functions
- Several get… functions for obtaining system information
- Enhancements to java loading, S3, Exchange, ORM, SOLR, image processing
- CFLoop GROUP attribute
- CFInclude RUNONCE attribute
- Support in querynew/queryaddrow to add data directly, simply

CF10 KEY HIDDEN GEMS: CACHING

- Query caching now stored in ehcache by default
  - Can be changed in CF Admin or application.cfc
  - this.cache.useinternalquerycache, this.cache.querysize
- New CFQuery cacheregion and cacheid attributes for cache control mgt
  - Can remove via new removeCachedQuery function
- New caching functions: cacheIdExists, cacheRegionNew, cacheRegionRemove, cacheRegionExists, cacheRemoveAll
- Can now clear CF's template cache on per-folder basis, in Admin or Admin API
- Several VFS enhancements

- That's it for changes per initial CF10 release…

CF10 KEY CHANGES PER UPDATES

- Of course, each update contains either bug fixes or security updates, or both
  - And some contain several dozen bug fixes, which has been encouraging
    - As well as various updates to Tomcat, some of which are important
  - But some updates introduce fairly significant changes
- Update 11 added support for SQL Server 2012, MySQL 5.6, 64-bit COM
- Update 14 added support for Java 8, Apache 2.4
- Update 18 added support for Windows 10, OS X 10.11/El Capitan
- …

ABOUT CF UPDATES

- Lists of updates, links to technotes, and offers jar download links!
  - *helpx.adobe.com/coldfusion/kb/coldfusion-10-updates.html*
- Also available for CF 11 and 2016:
  - *helpx.adobe.com/coldfusion/kb/coldfusion-11-updates.html*
  - *helpx.adobe.com/coldfusion/kb/coldfusion-2016-updates.html*
- Updates are cumulative, need only apply latest!
- If you have troubles applying CF updates in 10/11/2016, see my blog post:
  - *carehart.org/blog/client/index.cfm/2016/9/6/solve_common_problems_with_CF_updates_in_10_and_above*

CF10 ENTERPRISE-ONLY FEATURES

- New CF10 features that were Enterprise-only:
  - HTML 5 Charts (limitation lifted in CF11), ORM Search, Data import handler for Solr
  - Some aspects of new scheduler (chaining, listeners, exception handling, clustering, more)
  - Standard limits websockets to 100 simultaneous requests (limit lifted in CF11)
- …

CF10 LICENSING CHANGES

- EULA changes
  - CPU-based, CPU defined as 4 cores, CF licensed for 2 CPUs (so up to 8 cores)
  - Testing, staging, development remain free (as introduced in 9), as are backup and DR
  - VM licensing unchanged since 9, new Cloud licensing. Differences for Std vs Enterprise
  - Tweaked again in CF11 (more on that, later)
  - Observe distinctions about CF Standard vs Enterprise vs Developer edition
  - For questions, email *cfinstal@adobe.com*
    - CF Product Mgr, Rakshith Naresh, *rakshith@adobe.com*
  - More:
    - *wwwimages.adobe.com/content/dam/acom/en/legal/licenses-terms/pdf/Adobe%20ColdFusion%C2%AE%2010.pdf*
    - *web.archive.org/web/20121223084925/http://blogs.coldfusion.com:80/post.cfm/coldfusion-10-eula*
  - *cfmumbojumbo.com/index.cfm/coding/coldfusion-10-eula-changes/*

CF10 COMPAT ISSUES / GOTCHAS

- Verity text search engine removed, Solr carried forward from CF9
- Web services changes may break compat, easily resolved
  - See Admin-, application-, and code-level options to change wsversion, etc
- Single login at a time to CF Admin, for a given username (resolved in CF11)
- Web server connector issues/differences
  - Web server settings for 10 and up would conflict with CF9 settings on same web server
  - Need to "reconfigure" web server connectors after most CF10 updates (and 11)
  - Possible need of web server connector tuning
- …

CF10 COMPAT ISSUES / GOTCHAS

- Challenges with 64-bit and MS Access
  - Workaround: use Windows 32-bit ODBC control panel
  - *coldfusionmuse.com/index.cfm/2010/12/31/Access.on.64bit.ColdFusion*
- CF can no longer execute JSPs in website folders of external web server
  - Can only run them from CF's internal web server folder, [cf]/cfusion/wwwroot
- Finally: for any "bugs", always try latest available update of your CF version
  - Final CF10 update was 23: no longer updated since May 2017

CF10 RESOURCES

- What's new in ColdFusion 10
  - *help.adobe.com/en_US/ColdFusion/10.0/Developing/WSd160b5fdf5100e8f639b4550129d6ce3d4f-8000.html*
  - With links to more substantial discussions for each set of new changes
- *www.adobe.com/devnet/coldfusion/articles/coldfusion10-whatsnew.html*
- *tv.adobe.com/watch/coldfusion-10-deep-dives-for-developers/whats-new-in-coldfusion-10/*
- Security
  - *helpx.adobe.com/coldfusion/developing-applications/developing-cfml-applications/securing-applications/security-enhancements-in-coldfusion-10.html*
  - *www.adobe.com/devnet/coldfusion/articles/security-improvements.html*
  - *wwwimages.adobe.com/content/dam/Adobe/en/products/coldfusion/pdfs/cf10/cf10-lockdown-guide.pdf*
- …

CF10 RESOURCES (CONT.)

- Book: Adobe ColdFusion Web Application Construction Kit: ColdFusion 10 Enhancements and Improvements by Ben Forta, et al.
- *www.akbarsait.com/cf10tutorials.cfm*
- *www.seguetech.com/upgrading-to-coldfusion-10-feature-review-part-1/*
- My talk, "What's New and Different about CF 10 on Tomcat"
- *www.carehart.org/blog/client/index.cfm/2012/3/7/charlie_areharts_ultimate_cf10_new_features_list*
- And still more

CF 11

CF11 KEY MAJOR FEATURES

- Mobile app development/CFClient/CFBuilder Mobile features
- Full CFScript support
- Pixel-perfect PDF generation: CFHTMLtoPDF
  - Alternative to CFDOCUMENT, which is still supported
  - Leverages separate "CF Add-on Service"
- And still more…

CF11 KEY SECURITY CHANGES

- New dev/production/prod+secure profile install option
  - Can enable/disable secure profile via admin
  - If secure profile enabled, cflocation defaults to addtoken="no"
- Further lock down of things by IP address (including Admin API, RDS)
- New Anti-Samy/ESAPI functions, issafehtml, getsafehtml
- New Generatepbkdf2key function
- XSS functions (encodefor...)
- …

CF11 KEY SECURITY CHANGES (CONT.)

- New limitation on what extensions can be used in CFINCLUDE
  - Settable also in cfapplication or application.cfc: compileextforinclude
- CFMail encryption
- CFHttp AUTHTYPE for NTLM login
- CFZip PASSWORD and ENCRYPTIONALGORITHM attributes
- *www.adobe.com/devnet/coldfusion/articles/security-improvements-cf11.html*

CF11 KEY ADMIN/INSTALL CHANGES

- New Express edition (not for production use)
- Could allow multiple concurrent logins to Admin by same user
- New secure profile page
- Support for session replication AND sticky sessions (separate options again)
- Auto-hotfix mechanism added new prompt to watch for status/success
- Web server connector offered new backup option
- Access log which was enabled in CF10 was disabled by default in CF11
- And more

CF11 KEY LANGUAGE CHANGES

- Functions as first-class citizens
- Member functions
- Functional programming / higher-order functions (map, reduce)
- Elvis operator (?:)
  - *Name = userName ?: "Anonymous";*
- Over two dozen new functions

CF11 KEY HIDDEN GEMS

- CFQUERYPARAM CFSQLTYPE attribute: can now leave off cf_sql prefix for values, so either "cf_sql_integer" or just "integer" (Thanks to Pete Freitag for spotting that)
- Support for signatures in PDF creation
- cf_socialplugin
- Spreadsheet, JSON, charting, websocket enhancements
- New strict number validation: if true (default), results of numeric validations (in tags, functions, return from methods) fail if value is not truly numeric
  - Settable in cfapplication or application.cfc: strictNumberValidation
- …

CF11 KEY HIDDEN GEMS (CONT.)

- New application-level datasource definition, via application.cfc datasources[] array
- Charting enhancements (some compat issues, discussed later)
  - *helpx.adobe.com/coldfusion/developing-applications/working-with-documents-charts-and-reports/creating-charts-and-graphs/charting-enhancements.html*

CF11 KEY CHANGES PER UPDATES

- Hundreds of bug fixes over the many updates
- Update 3 re-enabled long-dormant DBVARNAME on CFProcparam
  - Had been ignored since CF6, except briefly in 7.0.1
  - Problem: some DBs now require prefix to dbvarname value (":" for Oracle and "@" for SQLServer)
  - You may have old code that just says dbvarname = "param1"; would now fail
    - For SQL Server, should be dbvarname = "@param1"
  - Update 4: new jvm arg to revert (jvm arg workaround NOT supported in CF2016)
    - -Dcoldfusion.ignoredbvarname=true
  - *blogs.coldfusion.com/coldfusion-11-and-dbvarname-attribute/*
- …

CF11 KEY CHANGES PER UPDATES (CONT.)

- Update 3 also added support for Java 8, SQL Server 2014, more
- Update 7 added support for Windows 10 and OS X 10.11/El Capitan/
- Update 13: CF uses CF Admin logging location for –out and –error logs
  - See *coldfusion.adobe.com/discussion/2308350/*
- More: *helpx.adobe.com/coldfusion/kb/coldfusion-11-updates.html*

CF11 ENTERPRISE/STD FEATURES

- New CF11 features that are Enterprise-only
  - PDF signature support
  - Full DDX support
  - WebSocket cluster support
  - CFHTMLTOPDF cluster support
  - REST multisite support
- Things formerly Enterprise-only now available in Standard
  - CF archive (car) mechanism (to move CF admin settings from server to server)
  - Security Sandbox (to lockdown what code in different directories can do)
  - HTML5 charts
  - Web socket limit lifted

CF11 LICENSING CHANGES

- EULA changes
  - More changes regarding cores, VMs
  - Observe distinctions about CF Standard vs Enterprise vs Developer edition
  - *wwwimages.adobe.com/content/dam/Adobe/en/legal/licenses-terms/pdf/Adobe_ColdFusion-Multi-20140214_1311.pdf*
  - See comments, *blogs.coldfusion.com/announcing-the-launch-for-coldfusion-11-and-coldfusion-builder-3/*

CF11 COMPAT ISSUES / GOTCHAS

- CF10 installer was removed when CF11 was released. See cfmlrepo.com
- CFChart issues
  - Some original charting issues solved by updates (3, 4, 5, 11, 12)
  - Removed: using XML to configure charts--now must pass json
    - Tool to help: cfchart_xmltojson (bat/sh)
  - *helpx.adobe.com/coldfusion/cfml-reference/coldfusion-tags/tags-c/cfchart.html*
- See previous discussions
  - DBvarname (in cfprocparam) suddenly *honored* in update 3
  - Strict number validation
- …

CF11 COMPAT ISSUES / GOTCHAS (CONT.)

- CF11 update 8 requires that any CF Admin queue timeout page (on request tuning page), to be an .htm file, not .cfm
  - Failure to change will cause CF to start but not run pages. See neo-runtime.xml, <var name='queue_timeout'>
  - Does not affect CF10 (no such limit) or CF2016 (which ignores and removes if filename is a .cfm)
- CF11 update 11
  - Broke any use you may have of an /api folder off the root of your site
    - CF now uses that (like /rest folder) for REST feature
    - If you will never use that CF REST feature, could tweak/remove config file references to /api:
    - [cf]\cfusion\wwwroot\WEB-INF\web.xml (and [cf]\config\wsconfig\[n]\uriworkermap.properties)
  - Broke CFTextArea richtext editor
    - Fixed in update 12
- …

CF11 COMPAT ISSUES / GOTCHAS (CONT.)

- CF11 update 12 broke CFinput type="datefield"
  - Fixed in update 13 (and CF 2016 update 5)
- New, more aggressive deprecation/obsoletion
  - mostly really old tags, like cfgraph, cfservlet, etc.
  - *wikidocs.adobe.com/wiki/display/coldfusionen/Deprecated+Features*
  - *webdevsourcerer.com/index.cfm/blog/post/slug/coldfusion-11-finally-deprecating-removing-things*
- If skipping 10, consider also those compat issues discussed for CF10
- And get to latest available CF11 update (update 14, as of Apr 2018)

CF11 RESOURCES

- *wikidocs.adobe.com/wiki/display/coldfusionen/New+in+ColdFusion*
- *helpx.adobe.com/coldfusion/release-note/coldfusion-11-release-notes.html*
- *wikidocs.adobe.com/wiki/pages/viewpage.action?pageId=140968014*
- *wikidocs.adobe.com/wiki/display/coldfusionen/ColdFusion+Language+Enhancements*
- *www.adobe.com/devnet/coldfusion/articles/security-improvements-cf11.html*
- *www.adobe.com/content/dam/Adobe/en/products/coldfusion/pdfs/cf11/cf11-lockdown-guide.pdf*
- *www.akbarsait.com/cf11tutorials.cfm*
- *www.seguetech.com/coldfusion-11-review*

CF 2016

CF2016 KEY MAJOR FEATURES

- Security code analyzer
- Performance improvements:
  - Option to change implicit scope search order
  - Option to change array passing to by reference vs default of by value
- External session storage (store CF sessions in REDIS)
  - Not J2EE sessions, but see *blog.svajlenka.com/post/125784752315/redis-and-coldfusion-because-why-not*
- API manager (really a separate application entirely)

CF2016 KEY MINOR FEATURES

- Command line interface (cf.bat) (helpx.adobe.com/coldfusion/2016/command-line-interface.html)
- PDF enhancements:
  - Redaction, sanitization, export/import comments/metadata
  - Archiving, attaching files, adding stamps
  - *adobe.com/devnet/coldfusion/articles/pdf-enhancements.html*
- NTLM support for cfobject/createobject, cfinvoke, cfsharepoint
- Generation of swagger docs from RESTful APIs
- More

CF2016 KEY LANGUAGE FEATURES

- Safe navigation operator (?.) for handling non-existent variables/values
  - <cfoutput>#employee?.firstname#</cfoutput>
  - Not to be confused with elvis operator from CF11 (?:)
- Ordered/sorted collections
- Dozens of new, changed tags and functions, new member functions
- Still more query-specific higher-order functions (querymap, queryreduce, etc)
- New CFLOOP item attribute, for looping over lists, arrays, or file contents
  - *Item* holds item being looped over, *index* (if any) holds index value
- CFMAILPARAM
  - New, optional **filename** attribute, to give different name for file attached to email when using **cfmailparam** file attribute
  - **File** points to name *as on server*, **filename** points to name *as shown in email*

CF2016 KEY SECURITY CHANGES

- Security Code Analyzer
  - Enterprise-only or Trial, and requires CF Builder 2016 (included with CF purchase)
- CF Admin (CFIDE folder) no longer accessible via external web server
  - cfscripts moved to separate folder which IS accessible
- CFOUTPUT
  - New **encodefor** attribute: names encoding type to be used for strings within its tags (for html, htmlattribute, url, javascript, css, xml, and so on)
  - Also offered as 2nd arg in writeoutput function
  - For more refined control, use **encodefor*** functions added in CF10
- *Helpx.adobe.com/coldfusion/2016/security-enhancements.html*

CF2016 KEY ADMIN CHANGES

- Requirement to use Akamai downloader removed
- Connector changes
  - No need to remove/add connector after updates (needed only once update 4)
  - New "update" option within WSCONFIG UI
  - UI now offers all 3 tunable args (adds pool size, timeout)
    - Better defaults, on Windows at least, for a 2-site setup (500/250)
  - Now offers option to configure "all" sites (to use one connector) or "all - individually" (each with own connector)
  - Fixed to properly support multiple instances
  - New "Advanced Settings" option to "skip iis custom errors"
- New applicationintent field, in DSN settings for SQL Server
- New admin setting to disable "REST discovery" by API Manager

CF2016 KEY CHANGES PER UPDATES

- Update 2
  - Added some new minor language elements, and ckeditor in favor of fckeditor for cftextarea, etc (does not yet seem to be happening in CF11)
- Update 3
  - Added more minor language enhancements
  - Added support for IIS 10 (in Windows 10), Websphere 9
  - Many tag/function enhancements
- Update 4
  - Broke CFinput type="datefield"
    - Fixed in update 5 (and CF11 update 13)
- Update 6
  - Fixes CFFTP use of SFTP/FTPS with more modern protocols; fixed a cfmail text problem
- Again see *helpx.adobe.com/coldfusion/kb/coldfusion-2016-updates.html*
  - Also *helpx.adobe.com/coldfusion/release-note/coldfusion-2016-updates-release-notes.html*

NEW INSTALLERS ADDING FEATURES

- New installer in Dec 2016
  - Split off of API manager from CF installer. No longer GB+ in size
  - Removed portlets, spry, YUI toolkit
    - YUI used by cfcalendar, cfinput "autosuggest"/"datefield", cfmenu, cftooltip, cfsprydataset
    - These will now break. Libraries can be added back, link offered here:
      - *helpx.adobe.com/coldfusion/deprecated-features.html*
  - Includes update 3 by default, and updated JVM
  - *blogs.coldfusion.com/coldfusion-2016-installer-refreshed/*
- New installer in May 2017 (64-bit Win only) adds Windows Server 2016 support
  - *blogs.coldfusion.com/coldfusion-2016-support-for-windows-server-2016/*

CF2016 LICENSING CHANGES

- EULA
  - Observe distinctions about facets related to whether CF Standard vs Enterprise vs Developer edition
  - *wwwimages.adobe.com/content/dam/acom/en/legal/licenses-terms/pdf/ColdFusion-2016.pdf*

CF2016 COMPAT ISSUES / GOTCHAS

- CF11 installer was removed when CF2016 was released
  - To "buy" CF11: *blogs.coldfusion.com/post.cfm/adobe-coldfusion-backward-licensing*
- Deprecated features (nothing obsoleted at initial release)
  - CFMEDIAPLAYER, CFTABLE, CFCHART format="flash", CFFILEUPLOAD Flash component
  - Report Builder
  - *helpx.adobe.com/coldfusion/deprecated-features.html*
  - *carehart.org/blog/client/index.cfm/2016/2/22/cf2016_deprecated_features*
- Update 3 DID remove support for portlets, spry, and YUI-based features
  - Can be added back manually
  - See bottom of *helpx.adobe.com/coldfusion/deprecated-features.html*
- …

CF2016 COMPAT ISSUES / GOTCHAS (CONT.)

- CF2016 docs:
  - Web docs lack any navigational features (left nav, breadcrumb, next/prev page, etc.)
  - PDF no longer available (poor at first, being revamped)
- If skipping 10/11, consider of course those compat issues discussed for CF10/11
- And try latest available update of your version (CF2016 update 6, as of Apr 2018)

CF2016 RESOURCES

- (In addition to those listed elsewhere in this section)
  - *adobe.com/devnet/coldfusion/articles/whats-new-cf-2016.html*
  - *helpx.adobe.com/coldfusion/whats-new.html*
  - *helpx.adobe.com/coldfusion/2016/topics/features.html*
  - *helpx.adobe.com/coldfusion/2016/language-enhancements.html*
  - *helpx.adobe.com/coldfusion/2016/other-enhancements.html*
  - *helpx.adobe.com/coldfusion/release-note/coldfusion-2016-release-notes.html*
  - *helpx.adobe.com/coldfusion/home.htm* (CF2016 docs)
  - Video on CF2016 (8-minute overview): *youtube.com/watch?v=Bm6dJjNSPNg*
  - *adobe.com/devnet/coldfusion/articles/language-enhancements-cf-2016.html*
  - *wwwimages.adobe.com/content/dam/acom/en/products/coldfusion/pdfs/coldfusion-2016-lockdown-guide.pdf*
  - akbarsait.com/cf2016tutorials.cfm

SUMMARY

- Phew, that's a lot new in 10, 11, 2016! **So did I meet my goal?**
  - Did you learn at least a few new things you want to try?
  - Or as important, things to watch out for?
- Again, my contact info for follow-up:
  - Charlie Arehart
  - charlie@carehart.org
  - @carehart (Tw, Fb, Li, Sk, Slack, Git)