HIDDEN GEMS IN COLDFUSION 2025

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▶ CF Server Troubleshooter

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▶ @carehart (Slack, Github, X, FB, LinkedIn, etc.)

▶ Updated Mar 25, 2025

Slide deck:
carehart.org/presentations

- CF2025 released Feb 2025 (indeed, 2/25/25—how about that?)
  - Despite what you may hear, many new features—and many hidden gems!
- And this talk will NOT cover ALL that's new in CF2025
  - Will point to many resources (docs, blog posts, videos) with more detail
  - Also, other sessions in today's CF Summit East cover *some* topics in more detail
- Again, slides for talk available online:
  - *carehart.org/presentations*
  - Because we have only 40 mins, I've cut out about 20%
    - All slides available in the PDF

INTRO

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- Installation/deployment
- Admin/config gems
- Language/coding hidden gems
- Compatibility/migration issues
- Various other considerations/gems

TOPICS

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- I focus on CF server troubleshooting, as an independent consultant
  - Assist organizations of all sizes, experience levels
  - Work <u>remotely</u> 99% of the time, safe, secure, easy (via **shared desktop**)
  - **Solve most problems in less than an hour**, teaching you also as we go
  - **Satisfaction guaranteed**
  - More on rates, approach, online calendar, etc at *carehart.org/consulting*
- But to be clear, I'm not selling anything in this session! ☺

ME.ABOUT()

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- Docs are substantial, and nearly all have demo code!
  - Adobe has also offered blog posts, videos on CF2025 before and since release
    - I'll mention some at key points and list all at the end
- Key resources point to still other resources on the new release
  - *helpx.adobe.com/coldfusion/using/whats-new.html*
  - *community.adobe.com/t5/coldfusion-discussions/now-live-adobe-coldfusion-2025-release/td-p/15176421*
  - *carehart.org/blog/2025/2/25/coldfusion_2025_released*

FINDING MORE ABOUT CF2025

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INSTALLATION/DEPLOYMENT

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- As always, CF2025 offers multiple installation/deployment options
  - Full/GUI installer (with optional silent install)
    - *helpx.adobe.com/coldfusion/installing/installing-the-server-configuration.html*
  - Zip installer option (was new for CF2021, also with optional silent install)
    - *helpx.adobe.com/coldfusion/user-guide.html/coldfusion/using/install-coldfusion-2021.ug.html*
  - JEE/WAR deployment
    - *helpx.adobe.com/coldfusion/installing/installing-the-jee-configuration.html*
  - Commandbox: adobe@2025
  - As well as …

INSTALLATION OPTIONS

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- Docker/container deployment (2025 images available)
  - Including images for CF, CF Add-ons (Solr, PDFg), PMT, and API Manager
  - *helpx.adobe.com/coldfusion/using/docker-images-coldfusion.html*
  - *carehart.org/presentations/#cf_docker_images_evolving*
  - *github.com/carehart/awesome-cf-compose*
  - More in a moment on CF2025 container improvements
- CF AMIs not available yet (as they are for CF2023, 2021), but when they are:
  - AWS AMI's for CF2025 (for Windows, Linux)
    - *aws.amazon.com/marketplace/search/results?searchTerms=coldfusion*
  - Azure VMI's (VM Images) for CF2023 (for Windows, Redhat, Ubuntu, AlmaLinux)
    - *azuremarketplace.microsoft.com/en-us/marketplace/apps?search=coldfusion*

INSTALLATION OPTIONS (CONT.)

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- Full/GUI installer
  - In the step for "select profile":
    - Now lets you enter an allowed ip address (for admin) for any profile (i.e., dev or prod)
    - Previously only editable if you picked "Production+Secure" profile
  - Now offers reminder that wsconfig must be run after install
    - Until about CF2016, installer would ask if you wanted to configure web server
    - Then it just disappeared from the installer. This change at least gives heads-up
- Both of these are things I lobbied for (created enhancement request for)

INSTALLATION "GEMS"

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ADMIN/CONFIG GEMS

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- Can now easily enable use of https for CF Admin (i.e., for CF built-in web server)
  - Can also disable http (to require use of ONLY https)
- In CF Admin, see *Server Settings* button on left, then *SSL Certificate* in top menu
- Can create self-signed cert using "create" option offered
  - Can leave "Distinguished Name" as default of CN=localhost
  - Enter a 6-char "password", and for "certificate name" could enter "localhost.jks"
  - Note that you MUST end the name with jks (as error message will tell you, otherwise)
    - This creates file with that name in the cfusion/runtime/conf folder
  - Then restart CF, and visit admin using https://localhost:8443/CFIDE/administrator
    - Accept browser challenge for "net::ERR_CERT_AUTHORITY_INVALID" (being a self-signed cert)
- More:
  - *coldfusion.adobe.com/2025/03/different-ways-of-enabling-ssl-for-coldfusion-administrator-running-on-internal-coldfusion-port-for-coldfusion-2025/*

EASIER ENABLING OF ADMIN USING HTTPS

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- ▸ Java&JVM page now shows path to jvm.config file that this page reads/changes
  - ▸ Helpful for those not familiar with where to find it!
    - ▸ And needed especially if a jvm config change leaves CF unable to start!
- ▸ This is another thing I filed enhancement request for ☺
  - ▸ Not bragging: encouraging you to do the same
  - ▸ *Tracker.adobe.com* (choose to "add bug" or "request feature")

OTHER ADMIN "GEMS"

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- ▸ Various pages/settings removed, related to CF feature removals (discussed later)
  - ▸ For example, "Allowed IP Addresses for Exposed Services" removed
  - ▸ But also…
- ▸ "System Probes" feature removed
- ▸ License scanner feature page (and startup/logging feature) removed
  - ▸ Detected if current instance's serial number was used on other machines in network
  - ▸ No longer needed with new licensing activation mechanism added in CF2021

ADMIN "REMOVALS"

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- Startup time improvements: as much as 60-70% reduction compared to CF2023/2021
  - No longer does CF restart on detection of config arguments
- Added support for container secrets and configs
  - Useful even if not using Docker Swarm
- New support for CCS within container (central config server feature, new in cf2023)
- Significantly Improved docker image docs
  - Many new sections: new env vars for 2025, ccs use, config precedence, ccs
  - *helpx.adobe.com/coldfusion/using/docker-images-coldfusion.html*
- Several important bug fixes
- More
  - What's new in containers (Adobe prerelease video)
    - *youtube.com/watch?v=AG4MFnrwXTE&list=PL3iywAijqFoUG3eRXeE2RHZ8OaekGpjtI*

IMPROVEMENTS IN CF CONTAINERS

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- ▶ Several performance improvements, at engine level (thus benefiting code)
  - ▶ Faster spreadsheet processing/streaming
  - ▶ Compile time
  - ▶ Query of queries
  - ▶ Charting
  - ▶ CF and container startup
  - ▶ Structures
- ▶ Performance whitepaper to come
- ▶ More:
  - ▶ Performance Enhancements (Adobe prerelease video)
    - ▶ *youtube.com/watch?v=qJ8_ZZmF-5M&list=PL3iywAijqFoUG3eRXeE2RHZ8OaekGpjtI*

PERFORMANCE ENHANCEMENTS

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- ColdFusion API Manager was introduced with CF2016
  - Always required CF Enterprise license to be used to install it
  - As of CF2025, it now does not require ANY CF license key/serial number!
- API Manager was (and remains) a powerful tool for managing/publishing APIs
  - Whether they run in CFML or not!
- Can add access control, versioning, rate limiting, caching…
  - As well as API documentation, analytics, metrics, SLAs, and more
- More on this (substantial docs):
  - *helpx.adobe.com/coldfusion/api-manager/coldfusion-api-manager-overview.html*
  - *youtube.com/watch?v=lTm4S2yXMN0*
  - *youtube.com/playlist?list=PL3iywAijqFoXGsIZXU3I2YV1N7MH-HiIU*

API MANAGER IS NOW FREE

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- As some may know, there have been various CF "jvm args" (technically "system properties") that could be used at CF startup to control various things

- Good news is that there is now a docs page listing these (many/most/all?)

  - *helpx.adobe.com/coldfusion/using/jvm-arguments-coldfusion-2025.html*

  - That's a hidden gem itself!

- Note there is only one new arg in 2025:

  - **-Dcoldfusion.datasource.blocked.properties**

  - With optional values: **allowLoadLocalInfile,allowUrlInLocalInfile,autoDeserialize**

  - Prevents use of those in connectionstring (when adding/editing a datasource)

NEW JVM ARG/SYSTEM PROPERTY

LANGUAGE/CODING HIDDEN GEMS

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- Powerful new processing of CSV files (read, write, process)
- Spreadsheets (fine-grained formatting control, "streaming" spreadsheets, more)
- Charts (chartsets, themes, groups, clustering, new chart types, svg charts, more)
- More on these (beyond docs, language reference):
  - Adobe CF github repo with demonstration code: *github.com/adobe/coldfusion*
  - *Spreadsheets & CSV Processing* (Adobe prerelease video)
    - *youtube.com/watch?v=7GUNmO0fBaA&list=PL3iywAijqFoUG3eRXeE2RHZ8OaekGpjtI*
  - *Unleash the power of Revamping CFCharts for modern applications*
    - *youtube.com/watch?v=W06xW8RZRLE&list=PL3iywAijqFoUG3eRXeE2RHZ8OaekGpjtI*

- And also another "major" feature …

MAJOR CHANGES PROMOTED

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- Support for MS "Entra", "Exchange Online" via Graph API (not related to GraphQL)
    - **CFOauth** adds **type="Microsoft"**, and new **grantType** attribute
    - New functions: **getOauthAccessToken()**, **GetMSGraphServiceClient()**
    - **cfexchangeconnection** tag adds new **access_token** attribute
        - Changes behavior in some **cfexchange**XXX tags (see docs on each)
- More:
    - *helpx.adobe.com/coldfusion/using/ms-graph-user-store-coldfusion.html*
    - *helpx.adobe.com/coldfusion/cfml-reference/coldfusion-tags/tags-m-o/cfoauth.html*
    - *coldfusion.adobe.com/2025/03/cloud-user-lifecycle-management-in-coldfusion/*
    - *coldfusion.adobe.com/2025/03/transitioning-exchange-online-integration-to-microsoft-graph-api-in-coldfusion/*
    - Microsoft Graph Integration in ColdFusion: Unlocking data with Oauth (Adobe prerelease video)
        - *youtube.com/watch?v=jspE0gQtvgo&list=PL3iywAijqFoUG3eRXeE2RHZ8OaekGpjtI*

- …now, on to "hidden gems" …

CHANGE REGARDING MICROSOFT AUTHENTICATION

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- New parameter, **loadPaths**
  - Allows naming of location for Java libraries (JAR files) or class files at runtime
  - CF10 had added application-level support (e.g., **this.javasettings.loadpaths**)
- Yes, Lucee has had this code-level ability for years. Now we do also!
  - Cat and mouse game: CF2025 supported Java 21 and Tomcat 10 before Lucee :-)
- More:
  - *coldfusion.adobe.com/2025/03/language-enhancements-in-coldfusion-2025-release-2/*

NAMING JAR PATH ON CFOBJECT/CREATEOBJECT

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- ▶ Not to be confused with "safe navigation" (?.) or "elvis" (?:) operators
  - ▶ ?. used to return empty value, such as if a key in a struct doesn't exist: foo?.bar?.baz
  - ▶ ?: used to SET a default/fallback value instead: foo?.bar?.baz ?: "fallback value"
- ▶ ?? returns right-hand side operand when left-hand is null or undefined
  - ▶ Otherwise, returns left-hand side operand
- ▶ Other related changes:
  - ▶ Elvis and ternary operators are now failsafe
  - ▶ Elvis operator uses Truthy values
  - ▶ Byte-code generation is optimized, reducing classes per Elvis operator
- ▶ More:
  - ▶ *coldfusion.adobe.com/2025/03/language-enhancements-in-coldfusion-2025-release-2/*
  - ▶ helpx.adobe.com/coldfusion/developing-applications/the-cfml-programming-language/using-coldfusion-variables/data-types-developing-guide.html#nullcoalescing

NEW "NULL COALESCING" OPERATOR (??)

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- Simplifies code (in cftry/cfcatch or try/catch):

```
try {

    // Code that might throw exceptions

}

catch (IOException | SQLException e) {

    writeOutput("An Exception occurred: " & e.message);

}
```

- More:

  - *coldfusion.adobe.com/2025/03/simplifying-error-handling-in-coldfusion-handle-multiple-exceptions-in-a-single-catch-clause/*

  - *coldfusion.adobe.com/2025/03/language-enhancements-in-coldfusion-2025-release-2/*

SUPPORT FOR MULTIPLE EXCEPTION TYPES IN A SINGLE CATCH

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- Trailing commas allowed where comma-separated list of values are provided...
  - Helps when more values "might" be added later in code, but maybe not
- Example (note last element):

  array = [

  "One",

  "Two",

  "Three",

  ];

- Supported in arrays, structs, function arguments / function calls, array/object "destructuring"
- More:
  - *coldfusion.adobe.com/2025/03/trailing-commas-in-coldfusion/*
  - *coldfusion.adobe.com/2025/03/language-enhancements-in-coldfusion-2025-release-2/*

SUPPORT OF "TRAILING COMMAS"

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- Content-Security-Policy (CSP): browser security mechanism
  - Allows restriction on how resources are loaded
  - Disables inline js and css by default
- To allow, must use "CSP header" and random "nonce" (number used once)
  - CF2025 adds such CSP/nonce support, which can be enabled either:
    - In CF Admin (Server Settings page checkbox)
    - in application (as **this.enableCspNonceForScript** in application.cfc or via cfapplication)
    - At request level, via **getCSPNonce()**
- More:
  - *content-security-policy.com*
  - *helpx.adobe.com/coldfusion/cfml-reference/application-cfc-reference/application-variables.html*
  - *helpx.adobe.com/coldfusion/cfml-reference/coldfusion-functions/functions-e-g/getcspnonce.html*

SUPPORT FOR CSP / XSS PROTECTION

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- **Duplicate()** now offers "**deepcopy**" arg: if false, does not do traditional deep/copy-by-value
- **deserializeJSON()** offers new **preserveCaseForStructKey**
- Compound assignments: do math and assign result (+=, -=, *=, /=, and %=)
  - x = 2; x += 3; // result is x=5
- New **cacheMaxIdleTime** for **cfquery/queryexecute/cfstoredproc** caching
- **Query of queries** changes: Bitwise operator support, modulus operator
- **directorylist()**: filter callback feature enhanced to return data for row being filtered
- **getTimeZoneInfo()**: optional **timezone** and/or **locale** args return info for there
  - Otherwise uses local system/jvm-specified timezone
- Enhancements to "destructuring" capability (added in CF2021)
- Enhancements to **cfdump/writedump** of java objects
- …

MANY OTHER LANGUAGE CHANGES

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- **hash()** offers new **outputEncoding** arg
- **listSort()** offers new **includeEmptyFields** arg for callbacks
- **final static** methods now supported
- **javacast()** supports multi-dimensional arrays
- **arrayInsertAt()** can now insert into an empty array
- **cffileupload** now offers a **continueOnError** attribute
- New functions: **structValueArray()**
  - **getPropertyFile()** , **getPropertyString()** / **setPropertyString()**
- More:
  - *helpx.adobe.com/coldfusion/using/whats-new.html#other-language*
  - *coldfusion.adobe.com/2025/02/language-enhancements-in-coldfusion-2025-release-part-1/*
  - *coldfusion.adobe.com/2025/03/language-enhancements-in-coldfusion-2025-release-2/*
  - *Smart language additions in ColdFusion* (Adobe prerelease video)
    - *youtube.com/watch?v=D-Vzj4nS4Fc&list=PL3iywAijqFoUG3eRXeE2RHZ8OaekGpjtl*

MANY MORE LANGUAGE CHANGES (CONT.)

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COMPATIBILITY/MIGRATION ISSUES

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- Many "old" language elements and features removed finally in CF2025
  - Most things have been marked for removal ("deprecated") for many releases
  - Some are removed for sake of security, or due to changes forced by libraries
- Some may affect few people/little code, while others may affect many/much
  - Just depends on whether you (or past coders) use/used these things
- Not so much "gems" as potential "traps"
- …

SUBSTANTIAL REMOVALS FROM CF2025

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- UI Tags based on YUI toolkit - **cftree , cfcalendar , cfmenu , cfsprydataset**
  - Unlike in previous releases, you cannot "add back" their support
- **cfinput – autosuggest** and related attrs, as well as **passthrough**, **sourcefortooltip**
  - Consider jquery alternatives and the like. See *static.raymondcamden.com/cfuitherightway/*
- **cfmediaplayer**
- **Axis1** web services (publishing or consuming): defaults now to **Axis2** instead (added in CF10)
- COM support
- **cftable** and related tags (cfcol, etc.)
- Mobile features (cfclient, etc.)
- XML Forms
- Flex/flash features
  - Event gateway features: DataManagement, DataServicesMessaging, FMS
  - CFChart flash format, cffileupload flash feature

TAGS/FEATURE SETS REMOVED

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- Some important removals of CFML functions
  - **parameterExists()** – will now get "Variable PARAMETEREXISTS is undefined" - use **isdefined()**
  - **HTMLEditFormat()** – use **encodeforhtml()** instead
  - **getTemplatePath()** – use **getCurrentTemplatePath()**
- Other generally little-used features
  - **cfapplet**
  - certain attributes of some tags
- All documented here: *helpx.adobe.com/coldfusion/deprecated-features.html*
- More:
  - *coldfusion.adobe.com/2024/12/important-notice-upcoming-deprecations-and-removals-in-coldfusion-2025-release/*
  - *community.adobe.com/t5/coldfusion-discussions/important-notice-upcoming-deprecations-and-removals-in-coldfusion-2025-release/td-p/15034185*

FUNCTIONS REMOVED, RESOURCES

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- CFCs that supported "tags as script", before CF11 enabled "all tags as script"
  - Might see it as **new query()** … or **createObject("component", "query")**
- CF9 had added: **query, storeproc, http, mail, http, ftp, pdf**
  - CF9.01 added: **pop, ldap, imap, feed, dbinfo**
  - CF10 added: **collection, index, search**
- The CFCs were previously found in \cfusion\CustomTags\com\adobe\coldfusion
- Related "service-layer CFCs" also removed (for calling these from outside CF)
  - Previously in \cfusion\wwwroot\CFIDE\services
- More:
  - *helpx.adobe.com/coldfusion/deprecated-features.html*
  - *helpx.adobe.com/coldfusion/cfml-reference/script-functions-implemented-as-cfcs.html*
  - *helpx.adobe.com/coldfusion/cfml-reference/script-functions-implemented-as-cfcs/script-functions-implemented-as-cfcs-in-coldfusion-9-update-1.html*

ALSO REMOVED: TAGS AS CFCS, SERVICE-LAYER CFCS

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- For decades, CFML templates could be "encoded" to obfuscate code
  - Done using cfencode tool in cfusion/bin
  - Was called cfcrypt originally, but was never "encryption" so was renamed
- In CF2025, not only has that cfencode tool been removed…
  - But so has the ability to RUN such encoded templates! Will now get error:
    - *"ColdFusion no longer supports files encoded with cfencode"*
  - May seem disastrous to those who have "only the encoded templates", not source
- Good/bad news: there have long existed tools that could decode such files
  - *github.com/disccomp/cfdecrypt*
- As for FINDING any use of such encoded files:
  - do file search for string "Allaire Cold Fusion Template" or "Adobe Cold Fusion Template"

REMOVED: SUPPORT FOR CFENCODED TEMPLATES ("CFCRYPT")

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- cfthread action="terminate" and ThreadTerminate() function removed
    - replaced with action="interrupt" and InterruptThread(), ThreadInterrupted()
    - Change forced by CF2025 running atop Java 21 (more on this later), which removed Thread.stop()
- More:
    - *coldfusion.adobe.com/2025/03/thread-interrupts-in-coldfusion/*
    - *helpx.adobe.com/coldfusion/cfml-reference/coldfusion-tags/tags-t/cfthread.html*
    - *helpx.adobe.com/coldfusion/cfml-reference/coldfusion-functions/functions-in-k/interruptthread.html*
    - *docs.oracle.com/javase/tutorial/essential/concurrency/interrupt.html*

CHANGE IN CFTHREAD INTERRUPTION

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- New things marked as "deprecated" (should not use) now in CF2025
  - CAR feature (use cfsetup instead, added in CF2021)
  - Sandbox Security feature
  - Use of MS Access and ODBC, DB2
  - Tomcat "Legacy cookie processor"
  - ssh-rsa algorithm in fingerprint attribute in cfftp
  - Event gateway features: SMS and SAMETIME
- *More:*
  - *helpx.adobe.com/coldfusion/deprecated-features.html*
- New policy for deprecation/removal process going forward:
  - *deprecated* items will now become ***unsupported*** in the next release
  - **deprecated and unsupported** items will be **removed** in release after that

ANTICIPATING FUTURE REMOVALS

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- You may feel overwhelmed by all these changes…
  - "how will we ever find all these?"
- Note first that there is the CF Admin "Compatibility Code Analyzer"
  - Updated for CF2025
  - Even if "no admin access", you can run your own local copy of CF for free
    - Assuming you can point it to your code, of course
  - *helpx.adobe.com/coldfusion/developing-applications/developing-cfml-applications/debugging-and-troubleshooting-applications/using-the-code-analyzer.html*
- Also, Pete Freitag/Foundeo offers Fixinator (commercial)
  - With new compatibility scanner (adding to its original goal of code *security* scanning)
  - More:
    - *petefreitag.com/blog/coldfusion-compatibility-scan/*
    - *fixinator.app*

ASSISTANCE WITH MIGRATION

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- New features and removal of old features are important
  - But so also are bug fixes, if they may fix a problem you've suffered
- There are 192 bugs fixes included with CF2025
  - Some may have less-wide impact than others, of course
- All listed here:
  - *helpx.adobe.com/coldfusion/release-note/coldfusion-2025-release-notes.html#bugfix*

CF2025 FIXES HUNDREDS OF BUGS

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- Issues from CF2023/2021 updates in March/June 2024, impacting cf2025
  - Change regarding searchimplictscopes (options for solving at code-, app-, jvm-level)
    - *carehart.org/blog/2024/3/12/cf_updates_march_2024_possible_breaking_change*
    - *carehart.org/blog/2024/7/18/dont_miss_helpful_feature_identify_implicit_scopes*
  - Change regarding default encryption algorithm for several functions
    - And **cfmx_compat** algo <u>can NO LONGER BE USED</u> in CF2025 and above (jvm arg ignored)
    - *carehart.org/blog/2024/6/11/cf_updates_june_2024_possible_breaking_change*
    - *carehart.org/blog/2024/7/22/on_handling_jun_2024_cf_update_change_of_default_encryption_algorithm*

COMPAT ISSUES BROUGHT IN FROM CF2023/2021

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- CF2021 introduced breaking change at release
  - changed dateformat() function's capital-D format value
  - "D" used to be regarded same as lower-case "d": day of month
  - Starting with CF2021, that "D" now means day of year!
  - Also affects datetimeformat(), etc.
- Matter remains unchanged in CF2023, 2025
- To revert behavior, use CF startup jvm arg:
  `-Dcoldfusion.datemask.useDasdayofmonth=true`
  - Again, see my migration talk for more, as well as CF Docs on dateformat

AND A BREAKING CHANGE FROM CF2021

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- Still other issues when **skipping CF2023** from 2021, 2018, or earlier
  - Will need to be aware of compat issues in those
  - And their impact will depend on how UPDATED that old release was, for you
- I've discussed these issues more in my past talks:
  - "*Migrating apps to ColdFusion 2023 from earlier versions*" (and 2021 version of talk)
  - My "hidden gems" talks for each past CF version
  - "*Migrating or Comparing CF Admin Settings, between instances/versions/engines*"
- Recordings and PDF slides for all these are at *carehart.org/presentations*

WHAT IF YOU'RE "SKIPPING" TO CF2025?

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OTHER CONSIDERATIONS/GEMS

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- CF2025 comes with Java 21.0.6 (latest as of Mar 2025)
  - Note that CF2023 ran on Java 17, while CF2021 and 2018 ran on Java 11
- Most JVM changes benefit only Java developers who change their code
  - More may eventually accrue to us as Adobe leverages them
  - One real possibility is use of Java 21's lightweight virtual threads, but not here yet
- Also, Java Security Manager has NOT yet been removed (only deprecated)
  - Is used by CF's Sandbox Security feature…which again IS now deprecated in CF2025

JAVA UPDATED TO 21

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- CF2025 (as server or zip deployment) comes deployed on now Tomcat 10.1

  - CF2023 ran on Tomcat 9

- For now, CF2025 comes with Tomcat 10.1.34 specifically (from Dec 2024)

  - Not the **very** latest, which is 10.1.39, which came out this month (Mar 2025)

- Change to Tomcat 10 mostly inconsequential to CF developers, but not entirely:

  - *coldfusion.adobe.com/2024/12/tomcat-upgrade-with-adobe-coldfusion-2025-release-what-has-changed/*

- As for a recent Tomcat CVE-2025-24813 causing concern among many

  - It does NOT affect us in CF, as CF is configured by default. For more, see:

    - *petefreitag.com/blog/tomcat-writes-enabled*

TOMCAT UPDATED TO 10.1

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- Elephant in the room: some may feel I "buried the lede"…on CF licensing…

- Now subscription-only (no more perpetual license, from CF2025 forward)
  - Pricing is published online
    - $760 USD / year for Standard (per 2 cores) – at 63/mo that's cheaper than Google TV!
    - $2930 USD / year for Enterprise (per 8 cores)
    - Basically about same price paid to buy CF every two years @ 50% upgrade discount

- Many people do **already** license CF on subscription basis, even before CF2025…
  - Those on AWS or Azure AMIs, those on ETLAs, those using CF hosting, etc.

- And doesn't affect those continuing to run on CF2023 or earlier

- Developer edition is also still free, of course!

MAJOR LICENSING CHANGE

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- What about those already on support? Or who recently bought 2023?
  - Reach out to Adobe at cfinstal@adobe.com
- What if you want to buy CF2023 instead?
  - As before, can buy CF2025 and "backward license" to CF2023
- Are there still education discounts? Yes
- More on pricing, licensing, licensing models (NUL, FRL), more.:
  - *carehart.org/blog/2025/2/25/coldfusion_2025_released#subscriptionchange*
  - *helpx.adobe.com/coldfusion/standard/faq.html* (one for Enterprise also)
  - *helpx.adobe.com/coldfusion/using/coldfusion-new-licensing-activation.html*

- Finally, I find no changes to *differences* between Standard and Enterprise

PRICING, LICENSING, ETC. (CONT)

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- When does public support (providing updates) end, for each recent version?
  - For CF2023, in May 2028
  - For CF2021, in Nov 2025
  - For CF2018, ended in July 2023
  - For CF2016, ended in 2021
  - For CF11, ended in 2019
- More:
  - *helpx.adobe.com/support/programs/eol-matrix.html*
  - *carehart.org/blog/2025/1/9/coldfusion2021_end_of_life_nov_2025*
  - *carehart.org/blog/2023/1/26/coldfusion2018_end_of_life_july_2023*

END OF LIFE/SUPPORT OF VERSIONS

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- ICMY: did you know CFBuilder is now a VSCode extension? That's <u>free</u>?
  - Released in July 2022, in extensions marketplace as **Adobe ColdFusion Builder**
  - Prior Eclipse-based version of Adobe CFBuilder is EOL since 2023
- Updated version supports CF2025, new tags/attributes, functions, statements
  - Updatable within VS Code Extensions pane
  - Current version v1.0.701 (from Feb 26 2025)
  - Also Mark Takata has indicated substantial improvements in reliability, debugging, etc.
- More:
  - *VS Code plugin changes* (Adobe prerelease video)
    - *youtube.com/watch?v=34MV0puVCzY&list=PL3iywAijqFoUG3eRXeE2RHZ8OaekGpjtI*

CFBUILDER/VSCODE IMPROVEMENTS

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- As of my writing this, there have not yet been any updates to CF2025

- Finally, let's wrap up with quick overview of library and system support info…

COLDFUSION 2025 UPDATES OFFERED SINCE INITIAL RELEASE

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- Antisamy 1.7.5 (OWASP security library)

- Avro 1.12 and Protobuf 3.25.5 (serialization options)

- Axis 2 1.2.1(web services library)

- Bouncycastle 1.53 (security/encryption)

- Ckeditor 4.22.1 (underlies cftextarea)

- Ehcache 2.10.9.2 (caching library)

- ElasticSearch 7.17.5 (caching option, pmt)

- Ext JS 7.6.0.41 (JS library underlying various UI tags)

- Esapi 2.5.3.1 (OWASP Enterprise Security API)

- Hibernate 5.6.15 (ORM library)

- Httpclient 4.5.13 (underlies CFHTTP and more)

- Java 21.0.6 (the JVM which underlies CF)

- Jedis 4.4.6 (underlies Redis caching)

- Jetty 9.4.51 (underlies Solr and PDFg)

- jQuery 3.6.0 and jQuery UI 1.13.2 (JS library underlying various UI tags and Admin interface features)

- Log4j 2.20.0

- Lucene 8.11.1 (underlies Solr search engine in CF)

- PDFReactor 11.6.11 (new cfhtmltopdf engine)

- POI 4.1.2 (underlies MS Office Integration features)

- Quartz 2.4.0 (underlies schedules tasks)

- Solr 9.7.0 (embedded search engine for cfsearch)

- tagsoup 1.2 (html/xml parsing)

- Tomcat 10.1.34 (app server underlying CF, when deployed in traditional "Server" configuration)

- ZingChart 2.9.14 (underlies cfchart)

UPDATES TO SOME UNDERLYING LIBRARIES' VERSIONS NUMBERS

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- MS SQL Server v2022, v2019

- MySQL 8

- Apache Derby 10.16

- And as provided in in CF Enterprise only:

  - PostgreSQL 16.3

  - Oracle 19c (LTS)

- Sybase support <u>removed</u> in CF2025

- Beyond "formal support", often older or newer versions may still work fine

- *helpx.adobe.com/pdf/coldfusion2025-support-matrix.pdf*

- See that for version support on DB-as-a-service: Azure, AWS, GCP

DATABASE VERSIONS SUPPORTED

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- Again, what's FORMALLY supported as of CF2025

- Windows Server 2022/2019/2016 (Datacenter, Standard, Essentials)

- Windows 11/10 (Home, Pro, Enterprise)

- macOS 15 ARM, macOS 15 x64

  - Before launching CF installer dmg, run "xattr -rc" command against it

- Red Hat Enterprise Linux 9.5 & later

- Ubuntu 24 LTS

- SUSE 15.5 & later

- Solaris is <u>no longer supported</u> as of CF2025

OPERATING SYSTEMS SUPPORTED

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- IIS 10
- Apache 2.4.62 & later
- JEE App servers
  - Tomcat 10.1.34
  - JBoss EAP 8
  - WildFly 35
  - WebLogic and WebSphere <u>no longer supported</u> as of CF2025

OTHER SUPPORTED VERSIONS

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- *coldfusion.adobe.com/2024/12/important-notice-upcoming-deprecations-and-removals-in-coldfusion-2025-release/*
- *coldfusion.adobe.com/2024/12/tomcat-upgrade-with-adobe-coldfusion-2025-release-what-has-changed/*
- *coldfusion.adobe.com/2025/02/language-enhancements-in-coldfusion-2025-release-part-1/*
- *coldfusion.adobe.com/2025/03/language-enhancements-in-coldfusion-2025-release-2/*
- *coldfusion.adobe.com/2025/02/revolutionizing-spreadsheet-csv-handling-in-coldfusion-2025-real-world-use-cases/*
- *coldfusion.adobe.com/2025/02/data-visualization-made-easy-with-cfchart/*
- *coldfusion.adobe.com/2025/02/oauth2-0-in-coldfusion/*
- *coldfusion.adobe.com/2025/03/simplifying-error-handling-in-coldfusion-handle-multiple-exceptions-in-a-single-catch-clause/*
- *coldfusion.adobe.com/2025/03/thread-interrupts-in-coldfusion/*
- *coldfusion.adobe.com/2025/03/trailing-commas-in-coldfusion/*
- *coldfusion.adobe.com/2025/03/cloud-user-lifecycle-management-in-coldfusion/*
- *coldfusion.adobe.com/2025/03/transitioning-exchange-online-integration-to-microsoft-graph-api-in-coldfusion/*
- *coldfusion.adobe.com/2025/03/different-ways-of-enabling-ssl-for-coldfusion-administrator-running-on-internal-coldfusion-port-for-coldfusion-2025/*
- *coldfusion.adobe.com/2024/05/thread-management-with-jdk21-whats-changing-and-features-to-look-forward-to/*

RESOURCES: ADOBE ARTICLES ON 2025

- *Adobe ColdFusion (2025 release) - What's new and Exciting!*
- *Security and Stability in ColdFusion*
- *Smart language additions in ColdFusion*
- *VS Code plugin changes*
- *Performance enhancements*
- *Unleash the power of Revamping CFCharts for modern applications*
- *Spreadsheets & CSV Processing*
- *Microsoft Graph Integration in ColdFusion: Unlocking data with Oauth*
- *What's new in containers*
- Recap and Q&A
- Playlist:
  - *youtube.com/playlist?list=PL3iywAijqFoUG3eRXeE2RHZ8OaekGpjtl*
- Watch for more in future at AdobeColdFusion youtube page:
  - *youtube.com/adobecoldfusion*

RESOURCES: ADOBE VIDEOS ON 2025

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- ▸ So, lots of "gems" (I count about 50 I shared, across language and features)
  - ▸ Also many more removals than ever before—for the sake of modernizing CF
  - ▸ Again, see slide deck PDF for some additional useful details
- ▸ Hope you may be more motivated—and informed—to consider CF2025
- ▸ Again, my contact info for follow-up:
  - ▸ Charlie Arehart
  - ▸ charlie@carehart.org
  - ▸ @carehart (Slack, Github, X, FB, LinkedIn, etc.)
  - ▸ Slides: carehart.org/presentations
- ▸ With that, thanks for your time! ...questions?

SUMMARY