# OPTIMIZING ADOBE COLDFUSION WITH FUSIONREACTOR APM:

UNLOCKING SUPERIOR PERFORMANCE AND RELIABILITY FOR YOUR APPLICATIONS



Charlie Arehart, Independent Consultant
CF Server Troubleshooter
charlie@carehart.org
@carehart (Slack, Github, X, Fb, Li, Skype, etc.)

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- Nearly all web apps require attention to performance and reliability
  - Regardless of how old your app is, or how complex
    - ▶ Whether deployed on-prem or in the cloud, or as a VM or via containers
    - Whether you have hundreds of users, thousands, or millions
  - Regardless of your CF version (or Lucee)
    - ▶ And whatever may be your DB server, your web server, etc.
- ▶ The challenge is universal:
  - Understand and fix urgent problems
  - ▶ Get notified when new ones may arise, then repeat process
  - Also identify and address important opportunities for improvement

#### A COMMON CHALLENGE

- ▶ Some have no real solution, to solve urgent or important problems
  - ▶ They may google error messages, attempt various tweaks, hope for the best
- ▶ Otherwise use basic diagnostics: debugging output, logs, metrics, os tools
- Others attempt to use Java monitoring tools
  - Simple ones are often challenging to use with service-based CF instance
  - And they and APM tools can be hard to relate diagnostics directly to CF
- ► CF PMT (new since CF2018) can help, but hard find it hard to implement
- ▶ One tool has been a staple of CF (and Lucee) troubleshooting/tuning...

#### HOW MIGHT YOU SOLVE THOSE NOW?

- Constantly updated/refined for over 15 years
  - Used by thousands of organizations, on many times more servers
- ▶ Runs within CF (or Lucee) instance, implemented as a java agent
  - can optionally push metrics, logs, other diagnostics to central FR repository
- Can leverage FR entirely within one instance (the "on prem" UI)
  - And/or view one or more servers centrally via "FusionReactor Cloud" UI
- ► Works with not just CF or Lucee but ANY java app/app server
  - And new capability adds far more! Observability agent
- ▶ Will demo on-prem, discuss the others

#### FUSIONREACTOR

- ► Introduction
- ► FusionReactor APM: premier monitoring tool
- ▶ Using on-premise FR UI for real-time insights, troubleshooting techniques, etc
- ► About FR Cloud and more
- ► Finding out more



- ▶ I focus on CF server troubleshooting, as an independent consultant
  - Assist organizations of all sizes, experience levels
  - Work <u>remotely</u>: safe, secure, easy via shared desktop (zoom, meet, teams, etc.)
  - ▶ 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! ©
  - ▶ Just sharing my experience, and that of others
- ▶ Presentation online at carehart.org/presentations



ME.ABOUT()

- ▶ Too numerous to list all, or demo all in this session
  - ▶ But let's demo some key things, discussing as we go
- ▶ First, about the live server/case study

## FR BENEFITS AND FEATURES

# DEMO TIME



- ▶ Overall CF health
- Requests and details; running and history (including queries, API calls, more)
- ► Transactions (cfhttp, cfthread)
- ► Archived metrics
- Profiling
- CPU sampler
- ► JVM garbage collection
- ► CP alert emails
- ► FR report emails
- ► System Metrics

### SUMMARY OF KEY FEATURES DEMOED

- Sessions
- User experience monitoring
- Event snapshots
- Debugging
- ▶ Memory spaces
- Memory profiling
- ▶ JMX metrics
- Requests by status codes
- ► Detecting "real" user IP address
- ► Showing headers on request list pages
- And more

#### SUMMARY OF KEY FEATURES NOT DEMOED

- ▶ All those past capabilities are available to all FR customers
  - Recently, FR went to having only one edition, Ultimate
- ▶ But what if you have multiple servers? Or multiple instances per server?
  - or run CF (or Lucee) on containers/docker/kubernetes?
  - Would want a single central "pane of glass", to watch them
- ▶ FR Cloud is that and much more
  - A separate FR Cloud UI, at a custom URL, running on servers managed by them
  - ▶ FR automatically pushes its metrics and logs to cloud—but that can be disabled
- ...quick look...then more about it...

#### FR CLOUD

- ► Can look back over extended periods of time, and across restarts
- ► Can serve as central logging facility
- ▶ Offers Grafana/promal, Loki/logal, Distributed tracing, and more
- ▶ Offers powerful Al-based diagnostics, analysis: OpsPilot
  - Vision feature (can use image/screenshot for diagnosis)
  - "DEEP" feature (improved root cause analysis)
  - ► Anomaly detection
- And still more
- See site, docs for info on FR Cloud

## FR CLOUD (CONT.)

- ▶ Finally, what if you want to monitor more than just CF or Lucee
  - Or other than Java apps/app servers?
- FR now offers optional "observability agent"
  - ▶ Monitors much more about your server/infrastructure on which those run
  - ▶ Including monitoring DB servers, API servers on machines not running CF/Lucee
  - Adds distributed tracing and more
- ▶ Feeds into FR Cloud UI, and Ops Pilot
- Really changes the game of what FR can "monitor"
- ► See site, docs for more

#### NEW OBSERVABILITY AGENT FEATURE

- ▶ See fusion-reactor.com, for much more
  - Product tours, docs, videos (including many on youtube)
  - Blog posts and tweets that highlight capabilities
  - Customer reviews
  - Purchase info (pricing, licensing, including available developer edition)
- ► Can also email or call them (contact offered on site footer)
- My FR webinar playlist (several hours)
  - youtube.com/playlist?list=PLG2EHzEbhy09al6Lx0JIIUcpbA8UrwPuo
- ► My youtube video on using FR CP email alerts
  - youtube.com/watch?v=TyPnyZV0yVM

#### FINDING MORE

- ► Most folks need to deal with performance and reliability issues
- ► FusionReactor is a premier monitoring tool for CF and Lucee
  - ▶ And not only is it "more than a monitor", now it monitors far more than CF/Lucee!
- Cloud capabilities are powerful, but for some the on-prem UI offers plenty
- ▶ Hope you've enjoyed this quick tour
- Reach out to me with follow-up/share feedback (direct or publicly)
  - ▶ Slack, Github, X, Fb, Li, Skype, etc. simply as @carehart
  - Email: charlie@carehart.org
- ...survey slide to follow...

#### SUMMARY

# Feedback Survey

In order to receive CPE credits, you must complete the feedback form in its entirety.

Scan the QR code or use this link: carah.io/CFSummit2024CPE

Codeword: DC Coder

