KEEP APPLICATIONS ONLINE

AND DETECT & ISOLATE

APPLICATION ISSUES & PERFORMANCE BOTTLENECKS IN NO TIME

WITH FUSIONREACTOR 6

Charlie Arehart
Independent Consultant
CF Server Troubleshooter
CArehart.org
@carehart

David Tattersall

Managing Director

Intergral, GmBH

@fusion_reactor

- Key new features in FusionReactor 6
 - ▶ Low overhead Profiler
 - Production Debugger
- Some additional FR 6 improvements
- ▶ Some FR 6 hidden gems
- Quick overview of FR's long-standing benefits
- Sneak peek at FusionCLOUD (coming soon)

WHAT WE'LL COVER

- Anyone interested in troubleshooting/tuning servers
 - Admins, managers, developers, devops
- Whether using any CFML engine
 - ▶ ColdFusion, Lucee, Railo, BlueDragon
- Or any Java application or server
 - > Tomcat, JBoss, Wildfly, Jetty, WebSphere etc.
- FusionReactor is implemented simply as a javaagent
- > And is a low-cost, low-impact, reliable tool
 - Trusted for 10 years by thousands of shops worldwide (25,000th license recently sold)

WHO DOES THIS TALK APPLY TO?

- Low overhead Profiler (in Ultimate edition)
 - Lets you see where the most time is spent within a request
 - Tracked automatically for requests slower than 200 ms (by default)
 - More:
 - http://www.fusion-reactor.com/production-java-profiler/
 - http://www.fusion-reactor.com/evangelism/introducing-fusionreactorsproduction-java-profiler/

> ...

KEY NEW FEATURES IN FR 6

- Production Debugger (Ultimate)
 - Lets you interactively step through code, view and change variables
 - > All without bother of setting up an IDE
 - And yet totally safe for even PRODUCTION use! (Patented)
 - Includes options to trigger emails (with details), break on exceptions, and more
 - More:
 - http://www.fusion-reactor.com/production-debugger
 - http://www.fusion-reactor.com/videotuts/?filter=prodDebug

KEY NEW FEATURES IN FR 6

- New tracking of information "by application" (or "transaction")
 - ► Helps better isolate issues if unique "per application" or trx
 - Shown on most pages, tabs at top of some, reports, etc.
 - App determined automatically
 - or either app or trx can be set programmatically
- Improved Relations tab (on request details)
 - Breaks down kinds of operations within a request (that FR monitors queries, httpclient, etc.)
 - And new Aggregates tab, to more simply aggregate that info

SOME ADDITIONAL FR 6 IMPROVEMENTS

- Memory use now tracked PER request, and PER query
 - Viewable in request/query details, and new report of largest
 - More: http://www.fusion-reactor.com/evangelism/Transaction-mory-Values-Explained
- System Resources (in Enterprise, Ultimate editions)
 - Track system CPU, memory usage, Network Traffic and Disk I/O
 - ▶ Track all running processes
 - Via System Resources option on left

SOME ADDITIONAL FR 6 IMPROVEMENTS (CONT.)

- ▶ CF Metrics and CF System Metrics
 - Track CF metrics like db pool stats, template cache size, query cache size, more
 - Some values shown only if CF Enterprise Svr Mon features enabled
 - Via Metrics option on left
- Changes to style of FR CP email alerts
 - Html formatted, tabular layout
 - > Thread id now offered with list of request details at top

SOME ADDITIONAL FR 6 IMPROVEMENTS (CONT.)

- New weekly, monthly reports (in Enterprise, Ultimate editions)
 - Tracking counts of requests, queries, their durations, 404s, sessions, etc
 - Daily report available in FR Standard, since FR 5
 - > FR6 offers extended daily report in Enterprise/Ultimate
 - More:
 - http://www.fusion-reactor.com/daily-report-email/
 - http://www.fusion-reactor.com/evangelism/FusionReactor-Daily-Reports

SOME ADDITIONAL FR 6 IMPROVEMENTS (CONT.)

- Sessions now tracked in User>Sessions
 - Was previously hidden in Metrics>Custom Series
 - Now includes tracking of session creation, removal, option to view per application
- Option to obfuscate SQL in UI (hides customer data w/in the sql)
 - ▶ JDBC>settings>transaction settings>obfuscate sql data
- Option to generate JDBC SQL Explain Information on very slow queries
 - > JDBC>settings>query plan settings

SOME FR 6 HIDDEN GEMS

- New tail feature in FR UI log viewer (for current hour logs)
 - ► See FusionReactor>Logs, then "Tail" button in top right of UI
- Can customize the daily/weekly/monthly reports
 - Can control many aspects of reports
 - Can set different emails for reports (as opposed to CP Alerts)
 - FusionReactor>plugins>active plugins>FusionReactor Reports Config

> ...

SOME FR 6 HIDDEN GEMS (CONT.)

- New default to not count "untracked requests" against CP threshold
 - Protection>settings>web request quantity settings>untracked requests
- ➤ To change profiler default triggering at > 200 ms, see:
 - FusionReactor>plugins>active plugins>FusionReactor Low Cost Profiler
- New option to Track CFML Line Execution Times (disabled by default)
 - ► FusionReactor>plugins>active plugins>FusionReactor ColdFusion Plugin
- To name just several

SOME FR 6 HIDDEN GEMS (CONT.)

- ▶ FR lets you do so much more as well
- Primary task: monitoring your CFML or Java app server
 - Tracking every request, and details about each
 - > And every query, and details about each
 - > And more
- End user performance monitoring (time spent getting to/from client)
- Logs (that let you track all this data and more, over time)
 - > Self-managed to not take up space, and high-speed, so little impact
- ▶ ...and

QUICK OVERVIEW OF FUSIONREACTOR'S LONG-STANDING BENEFITS

- Optional alerts about problematic situations
 - with emails showing tremendously useful status info
 - > and the possibility of protecting against some crashes
- Stack tracing to identify line of code, while currently running
- > and still much more!
- All with very little overhead
- and including optional monitoring from mobile devices

QUICK OVERVIEW OF FUSIONREACTOR'S LONG-STANDING BENEFITS (CONT.)

- ► Check out free 14-day trial (latest version is 6.1.3)
- ▶ Inexpensive licensing, by monthly subscription or perpetual purchase
 - > 3 editions: Standard starts at \$39/month, Enterprise 59/mo, Ultimate 79/mo
 - ▶ Newly available Developer edition: \$100, plus \$99 annual maintenance
- More at http://www.fusion-reactor.com
 - Docs, videos, technotes, blog, google group, and more
- Or come by the booth here to meet the FR folks
 - Including David Tattersall, Managing Director
 - Who I would like to introduce now to discuss another upcoming tool

NEXT STEPS

SNEAK PEEK AT FUSIONCLOUD (COMING SOON)