

# KEEP APPLICATIONS ONLINE

*AND DETECT & ISOLATE  
APPLICATION ISSUES & PERFORMANCE BOTTLENECKS*

*IN NO TIME*

# WITH FUSIONREACTOR 6

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- ▶ Key new features of FusionReactor 6
  - ▶ Low overhead Profiler
  - ▶ Production Debugger
  - ▶ Applications view
- ▶ Additional FR 6 improvements
- ▶ Quick overview of FR's long-standing benefits
- ▶ New FusionCLOUD offering

## WHAT WE'LL COVER

- ▶ Anyone interested in troubleshooting/tuning servers; solving coding issues
  - ▶ 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.
  - ▶ Or java applications: Solr, Confluence, etc.
- ▶ FusionReactor is implemented simply as a javaagent
- ▶ And is a low-cost, low-impact, reliable tool
  - ▶ Trusted for over 10 years by thousands of companies (over 30K servers world-wide)

## WHO DOES THIS TALK APPLY TO?

- ▶ Low overhead Profiler
  - ▶ Lets you see where the most time is spent within a request
  - ▶ Tracked automatically for requests slower than 3 second (by default)
    - ▶ Samples at 200ms intervals (by default). Both values can be changed
  - ▶ More:
    - ▶ [fusion-reactor.com/production-java-profiler/](https://fusion-reactor.com/production-java-profiler/)
    - ▶ [fusion-reactor.com/evangelism/introducing-fusionreactors-production-java-profiler/](https://fusion-reactor.com/evangelism/introducing-fusionreactors-production-java-profiler/)
    - ▶ [docs.intergral.com/display/FR62/Profiler](https://docs.intergral.com/display/FR62/Profiler)
- ▶ ...

## KEY NEW FEATURES IN FR 6

## ▶ Production Debugger

- ▶ 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, conditions, and more
- ▶ More:
  - ▶ [fusion-reactor.com/production-debugger](http://fusion-reactor.com/production-debugger)
  - ▶ Videos: [fusion-reactor.com/videotuts/?filter=prodDebug](http://fusion-reactor.com/videotuts/?filter=prodDebug)
  - ▶ [www.fusion-reactor.com/latest-fr-document.php?type=debug](http://www.fusion-reactor.com/latest-fr-document.php?type=debug)
  - ▶ [docs.intergral.com/display/FR62/Debug+Examples](http://docs.intergral.com/display/FR62/Debug+Examples)

# KEY NEW FEATURES IN FR 6 (CONT.)

- ▶ Applications view (*Requests>Applications*)
  - ▶ View breakdown of requests, within a selected application
  - ▶ Tracking count, total/ag duration, total/avg memory, total/avg cpu of requests
    - ▶ per last 1/10/30 minutes, last hour, since restart
  - ▶ Great for finding where most resources are being used, per aggregate of requests
  - ▶ More:
    - ▶ [fusion-reactor.com/news/announcing-fusionreactor-6-2/](https://fusion-reactor.com/news/announcing-fusionreactor-6-2/)

## KEY NEW FEATURES IN FR 6 (CONT.)

- ▶ Improved Relations tab (on request details)
- ▶ Memory use now tracked PER request, and PER query
- ▶ Can view aggregate totals of CFHTTP/httpclient URLs across ALL requests:  
*Transactions>External Resources*
- ▶ New *System Resources* feature
- ▶ New *Metrics>CF Metrics* and *Metrics>CF System Metrics*
- ▶ ...

## SOME ADDITIONAL FR 6 IMPROVEMENTS

▶ Still more

- ▶ Option to obfuscate SQL in UI (hides customer data w/in the sql)
- ▶ Option to generate JDBC SQL Explain Information on very slow queries
- ▶ Changes to style of FR CP email alerts
- ▶ New weekly, monthly reports
- ▶ New tail feature in FR UI log viewer (for current hour logs)
- ▶ And more ...

SOME ADDITIONAL FR 6  
IMPROVEMENTS(CONT.)



- ▶ Covered in hidden gems in FR6, in new webinar
  - ▶ And another: Hidden Gems in FR (for those in FR 6 or earlier)
- ▶ Still other coming additional ones (tentative titles)
  - ▶ Troubleshooting with FR
  - ▶ Advanced FR use
  - ▶ Foundations of FusionReactor
- ▶ Indeed, before concluding, I want to highlight such fundamentals briefly...

## MORE HIDDEN GEMS IN FR6 (AND 5)

- ▶ FR lets you do so much more than these “new” things discussed today
- ▶ Primary task: monitoring your CFML or Java app server
  - ▶ Tracking every request, and details about each
  - ▶ And every query, and details about each
  - ▶ Also offers info on heap use, cpu, and much, much more
- ▶ And many folks focus on slow requests/queries, high cpu/memory
  - ▶ FR helps easily see when and where such problems happen
- ▶ But folks are often left wondering why
  - ▶ Good news: the answers are usually there, with just a little effort...

## QUICK OVERVIEW OF FUSIONREACTOR'S LONG-STANDING BENEFITS

- ▶ Fundamental (not new) features which everyone using FR should know
  - ▶ Covered in Fast Track training, FR docs, FR site feature pages, and so on
  - ▶ Stack tracing
    - ▶ to identify line of code, while request is currently running
  - ▶ FR CP alerts
    - ▶ to show tremendously useful info by email at time of hangup
    - ▶ and the possibility of protecting against some crashes
  - ▶ Logs
    - ▶ To track nearly all FR data over time
    - ▶ Self-managed to not take up space, and high-speed, so little impact
  - ▶ End-user performance monitoring (time spent getting to/from client)

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

- ▶ All this is done with very little overhead
  - ▶ Intended to be used in production, even overloaded servers
- ▶ And info available via mobile devices (in FR Enterprise)

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



- ▶ Check out free 14-day trial (latest version is 6.2.4)
- ▶ Inexpensive licensing, by subscription or perpetual purchase
  - ▶ 3 editions: **Standard** starts at €35/month, **Enterprise** 53/mo, **Ultimate** 71/mo
  - ▶ Newly available Developer edition: \$100, plus \$99 annual maintenance
- ▶ More at [fusion-reactor.com](http://fusion-reactor.com)
  - ▶ Docs, videos, technotes, blog, google group, and more
- ▶ Or come by the booth here to meet the FR folks
  - ▶ David Thacker, and Managing Director David Tattersall
  - ▶ Who I would like to introduce now to discuss another new tool

## NEXT STEPS

- ▶ CLOUD Dashboard – very configurable, thresholds, grouping servers
- ▶ Bi-directional secure channel (SOCKET) – Ability to send requests down to your server e.g. Stack Trace / Garbage Collection / Execute script
- ▶ Application view – generated from individual or clustered servers
- ▶ Application broken down by %Time taken, Average, Slowest, Throughput, #Errors
- ▶ Automatic identification of "interesting transactions"
- ▶ Ability to SAVE requests, transactions, stack traces, JDBC
- ▶ Server Metrics, Transactions, Requests, JDBC
- ▶ Alerting Engine for email, PagerDuty, HipChat, Email, Slack, OpsGenie , VictorOps, FLOWDOCK, Twilio, IRCCAT etc.

## NEW FUSIONCLOUD FEATURES

- ▶ Hybrid Solution – FusionReactor on-premise + FusionCLOUD (optional)
- ▶ Infrastructure runs on AWS
- ▶ Beta has been running for around 12 months – now migrating beta users „soft rollout“
- ▶ Licensing Model
  - ▶ CLOUD – Server Reservations combined with On-demand (similar to AWS)
- ▶ Editions available –
  - ▶ Enterprise – Multi-Server, Advanced Reporting, Mobile Client, Enterprise Scripting
  - ▶ Ultimate – Production Debugger, Production Profiler, Production Memory Analyzer (TBA)
- ▶ Pricing
  - ▶ Enterprise - €88 month / €889 year
  - ▶ Ultimate - €134 month / €1340 year

## NEW FUSIONCLOUD FEATURES (CONT.)