

MONITOR, TROUBLESHOOT & PROTECT YOUR CF/RAILO SERVERS WITH FUSIONREACTOR 5

Charlie Arehart
Independent Consultant

charlie@carehart.org / [@carehart](https://twitter.com/carehart)



CHARLIE AREHART, @CAREHART
CHARLIE@CAREHART.ORG

INTRODUCTION

- With only about 50 minutes, with time for questions, can't cover everything
 - Two primary goals
- Why I use FusionReactor and help people use it daily
 - And why I think everyone using CF and Railo should be
- For those already using it, why you want to move to FusionReactor 5
 - What's new, different, and better
- Note: this is a “sponsor session”

ABOUT INTERGRAL

- Intergral GmbH, founded in 1998
- Privately and jointly owned by
 - David Tattersall (CEO)
 - Darren Pywell (CTO)
- Headquarters located in the Technology & Business Park, Stuttgart, Germany
 - Other offices in UK (Intergral Ltd. - 2008), USA (Intergral Inc. – 2011)
- Global customer base – 3500+ customers
- Frequent sponsor, contributor to CF events around the world



WHY USE FUSIONREACTOR

- A few key points before live demo...
- More than just a monitor
 - Can watch what's going on now as well as historically
 - In interface and in substantial logs
 - FR can automatically watch for when certain common problems arise
 - Can alert you and even possibly protect server
 - Can view details of currently running request down to line of code
 - All this is vital to understanding real nature of problems

WHY USE FUSIONREACTOR (CONT.)

- Can monitor running request details, as well as queries, memory, cpu and much more
 - Can monitor any query processing: not just cfquery, cfstoredproc, but ORM, etc.
- Options to attempt to kill requests, via interface or automatically via alerts
- FR is intended for use constantly on production servers
- Can monitor more than just ColdFusion: including Railo, OpenBD
 - As well any JEE server or Java app, including Solr
- Low-cost license is per server (physical or virtual)
 - One license needed for all app servers/instances on a server

DEMOS

- Monitoring running requests
- Monitoring request history
 - Recent, longest-running since startup, recently slow, and by return code
- Leveraging logs (for postmortem and more details)
- Stack Traces
- Alerts
- Enterprise Dashboard (web, AIR, and mobile)
- Still many more features, but no time to cover them all

FOR MORE INFO ON FR...

- We'll next explore specifically what's new in FR 5+
- Goal to this point has been to encourage you to explore, purchase
 - Can find more info at fusion-reactor.com, or at Intergral booth here at conference
 - Can also hire them (or myself) to help use it, solve problems with it
 - cfconsultant.com

WHAT'S NEW IN FUSIONREACTOR 5

- Am now talking to those using FR, or who knew about it, but as FR 4 or earlier
- Will cover first main improvements in FR 5
- Then various key improvements in subsequent 5.0.x, 5.1, 5.1.x releases
 - We have our work cut out: 9 slides worth of improvements!

WHAT'S NEW IN FUSIONREACTOR 5

- Main improvements
 - No longer based on Flash, but HTML 5 instead
 - Also general overall UI improvements, reorganization
 - Some pages have context menu in top right (i.e., Requests>Response Codes)
 - FR now java agent-based, as opposed to previous servlet filter-based
 - You no longer need to wrap datasources: FR now automatically monitors all DSNs
 - New User Experience Monitoring tracking
 - New licensing portal: easier activation/deactivation/transfer of licenses among machines

WHAT'S NEW IN FUSIONREACTOR 5 (CONT.)

- Other improvements
 - Each page now has own URL (can use browser refresh to reload, can bookmark, etc.)
 - Can now display info back to a week (or CF restart, whichever comes first)
 - “History” pages now each keep their own detail history!
 - recent, longest-running since startup, recently slow, by return code, etc.
 - Pages with errors now show error details within request details
 - Can track CF sessions within FR

WHAT'S NEW IN FUSIONREACTOR 5 (CONT.)

- Other improvements (cont.)
 - Can track details of cfhttp, web service invocations (as “transactions” in FR)
 - Can track heap/non-heap memory, gc's, classloading, and more
 - Option to track user's ip address based on x-forwarded-for
 - (as when passed from load balancer)
 - See Requests>Settings>Proxy>Proxy Header
 - Option to track user-agent in request log
 - Option to download logs via FR UI

WHAT'S NEW IN FUSIONREACTOR 5 (CONT.)

- Other improvements (cont.)
 - Custom metrics (Metrics>Custom Series)
 - Customizable metrics dashboard (see gear icon on Web Metrics graphs)
 - Crash protection settings improved
 - On running request and memory alerts, can optionally trigger “after x seconds”
 - On memory alert, can optionally do a garbage collection
 - Profilebox (ColdBox-specific integration, offering lower levels of detail within request)
 - And still more

WHAT'S NEW IN FUSIONREACTOR 5 (CONT.)

- Added in 5.0.8
 - Support for tracking details within requests such as cflock time
 - See <http://www.fusion-reactor.com/support/kb/frs-325/>
 - And more
- Added in 5.0.9
 - Daily Report email
 - UEM tracking now per request
 - Change to not log queries unless FA connector enabled
 - Change to track query location only for queries taking longer than 100 ms by default

WHAT'S NEW IN FUSIONREACTOR 5 (CONT.)

- Added in 5.0.9 (cont.)
 - Improvements for running on IE 8
 - Fixed problem of filepaths reported without slashes in CP alert emails
 - Fixed problem of aggressive UI caching
 - Tracking of query of queries disabled by default
 - and still more

WHAT'S NEW IN FUSIONREACTOR 5 (CONT.)

- Added in 5.1.0
 - Considerable usability enhancements for instance manager wizard
 - Restored ability to manage multiple instances at once (such as to update)
 - Fixed UI problems with "test email" functionality in FR settings page
 - Fixed text-wrapping display problems on lower resolution monitors
 - Now possible to configure time at which daily report runs
 - Better wording when referring to jdbc activity (transactions vs requests)
 - By default, JDBC logging is disabled

WHAT'S NEW IN FUSIONREACTOR 5 (CONT.)

- Added in 5.1.0 (more)
 - Users can configure proxy settings for licensing/activation
 - CP alert now lists running queries in any running request (listed at end of line in summary of running requests)
 - CP alert now shows content-length for a request (if available)
 - CP alerts now have option (if killing requests) to do so without checking for ownable synchronizers (optionally)
 - Support for CF11
 - And still more

WHAT'S NEW IN FUSIONREACTOR 5 (CONT.)

- Added in 5.1.1
 - No longer need license key to use instance manager for adding/removing instances
 - And more
- Added in 5.1.2
 - Support for Windows Server 2012 R2
 - And more
- Phew!
 - You can see that the guys are active about keeping FR updated!

CONSIDER ALSO FUSIONANALYTICS AND ...

- Focus of talk has indeed been FR, and its interface (and logs and alerts)
 - But what if you want to analyze information over weeks, months, years?
 - Or in more ways than FR currently provides in interface (but does log)?
- FusionAnalytics is another solution from Intergral
 - For more, see fusion-analytics.com
 - live demo, docs, online videos, discussion list and more
- For better, faster interactive step debugging through CFML code, consider FusionDebug
 - See fusion-debug.com
- And there is coming yet one more new product from Intergral...

SUMMARY

- Again, had two primary goals
 - Introduce it to those new to it, to appreciate how useful it can be
 - Provide updated info for those who've used FR4 or below
 - Or maybe have moved to FR 5 and did not realize all that was new!
- Again, can find more info at fusion-reactor.com, or at Intergral booth here at conference
 - Docs, technotes, videos, blog, discussion list, live demo, and more
- Don't struggle with understanding how to install, use, solve problems with FR
 - Search, read, ask (support@fusion-reactor.com or the discussion list, or me)