

FusionReactor Webinar: Configuring FusionReactor for Action

INTERGRAL
information solutions

 fusion
reactor™

Introductions



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(Focused on server troubleshooting)

Agenda

- Foreword
- Problems, and their solutions via FR configuration
- Configurable FR options covered in other webinars or videos
- Other configurable FR options
- Upcoming other webinars
- Other FR resources
- Questions & answers

Foreword

- Audience: presumed to already be using FR
- Will review key configurable FR options and their benefits
 - Including how they may help you get to the root of your problems with Java or CFML servers
 - Some are things not enabled by default, or the defaults may not suit everyone
- Will not be covering EVERY configurable option: would take more than an hour! :-)
 - Focus is on key configurable features
 - But ones I find that people often miss
- Often will point to online docs for additional information
 - Preso is being recorded, so you will be able to come back to get URLs
- Will try to demonstrate both changing and seeing the results of most changes

Problems, and their solutions by configuration

- Daily reports of overall instance activity —just say who should get them
- Crash Protection alerts—know when problems are happening before users do
- Enterprise Dashboard—watch multiple instances from one screen
- User Experience Monitoring—tracking network and browser-render time
- Request-related problems and configuration options
- Query-related problems and configuration options

Daily reports of overall instance activity—just say who should get them

- FR offers useful daily reports (and weekly/monthly for Enterprise/Ultimate users)
 - Tracking uptime/downtime/outages, counts of requests, errors, sessions
 - Avg req time, db time, cpu and heap use; request counts by status code, more
 - Let's see one of each
- They're not enabled by default, though. FR wouldn't know who to send them to
 - You simply need to indicate the email address/es and mail server
 - Configured with FusionReactor menu (top left corner) and its Settings page
 - Can specify multiple TO email addresses, separated by commas
 - Can often set the FROM address to be a non-existent address (FR-instancename@yourdomain.com)
 - Will depend on your mail server's flexibility
 - Note available "Send test email" button to test things (after first "saving" changes)
 - CF users: use CF Admin "Mail" page to find what mail server it uses
- More: docs.intergral.com/display/FR62/FusionReactor+Report+Plugin

Crash Protection alerts—know when problems are happening before users do

- Many leverage FR to watch what's going on now, and/or when there are problems
 - What about when you're not looking? Or if your instance restarts?
- FR CP (crash protection) alerts can inform you of problems by email
 - They can also optionally reject/queue (and even attempt to kill) requests
 - But just getting the email alone is quite valuable
- Let's look at one...
- So much useful information
 - Count of requests running, cpu/memory use, etc.
 - Requests running at time of alert: url, querystring, ip address, optionally user agent, more
 - Any query running for a given request at time of alert (sql, duration)
 - Ends with thread dump (stack trace of each running thread)
 - Can be used to identify specific line of code running in each request at time of alert
- ...

Crash Protection alerts—know when problems are happening before users do (cont.)

- More on CP alerts:
 - Videos on setup of alerts, use of stack traces/thread dumps
 - fusion-reactor.com/videotuts/?filter=troubleshooting
 - Separate manual available
 - docs.fusion-reactor.com/display/FR62/Protection+and+Monitoring+with+FusionReactor

Enterprise Dashboard—watch multiple instances from one screen

- Available with Enterprise and Ultimate (and Trial) editions
- ED lets you see high-level status of each monitored instance
 - Can drill down to see more details
 - Can link from that to still more detail, to see FR interface for selected instance
- Let's take a look...
- Note you can configure the dashboard to exist in ANY FR instance
 - Probably best to be in a FRAM instance, watching the "real" instances
 - Perhaps even on a box that otherwise has no traffic/risk of crashing
- ...

Enterprise Dashboard—watch multiple instances from one screen (cont.)

- ED will also email you if instance becomes unreachable (and when it returns)
 - Assuming you have configured mail in FusionReactor>Settings in dashboard's instance
 - Doesn't mean instance is necessarily "down", just that the ED can't reach it to get metrics
 - Note if ED configured in instance which itself goes down, you won't get email telling you
- *More: docs.fusion-reactor.com/display/FR62/Enterprise+Dashboard*
- Also enables mobile app interface (IOS and Android)
 - More: *docs.fusion-reactor.com/display/FR62/Mobile+App*
 - And optional AIR dashboard: *docs.fusion-reactor.com/display/FR62/Air+Dashboard*
- Also provides for scripting on detection of instance availability
 - More: *docs.fusion-reactor.com/display/FR62/Using+FusionReactor+Enterprise+Scripting*

User Experience Monitoring—tracking network and browser-render time

- Helpful to understand when performance problems are not on server
 - Tracks time spent sending response down to client, and on client
- Results tracked in User>User Experience (graph of time across all requests)
 - And per request, in Relations tab
 - Let's look...
- Does require changing your own code to track this
 - Very similar to enabling google analytics and such
 - Docs offer specific details, including examples in CFML, JSP, etc.
- More: separate manual available
 - [*docs.fusion-reactor.com/display/FR62/User+Experience+Monitoring+\(UEM\)*](https://docs.fusion-reactor.com/display/FR62/User+Experience+Monitoring+(UEM))

Request-related configuration options

- Tracking the “real IP address” for users, in a proxied environment
- Tracking request User Agents (the browser or spider/robot type)
- Obfuscating sensitive data in requests
- More: *docs.intergral.com/display/FR62/Request+Settings*
- Configuring display of sessions by application
 - More: *docs.intergral.com/display/FR62/User+Sessions*

Query-related configuration options

- Via FR JDBC Settings page
 - Logging slow queries
 - Tracking database “explain plan”
 - Viewing longer-length SQL statements
 - Tracking more queries per request
 - Obfuscating sensitive data in SQL
 - Disabling display of parameterized query values (aka, cfqueryparam values)
 - More: *docs.intergral.com/display/FR62/JDBC+Settings*
- Via manipulation of datasource connection string (such as in CF Admin DSN page)
 - Tracking datasource names
 - Preventing queries being monitored by FR for a given datasource
 - Logging large number of records returned from queries
 - More: (separate manual) *docs.intergral.com/display/FR62/JDBC+Monitoring*

Configurable FR options covered in other webinars or videos

- Profiler
 - More: docs.intergral.com/display/FR62/Profiler
- Debugger
 - More: docs.intergral.com/display/FR62/Debug

Other configurable FR options

- **Just not enough time to detail these here**, but be aware of them:
- Logging: location, rotation, etc.
- Enabling limited functionality users: FR>Change Password
- FR>Plugins, many available “configuration” buttons
- Metrics>Web Metrics graph configurability
- Other settings in FR>Settings, Requests>Settings, JDBC>Settings, etc.
- Protection restrictions
- Request content capture
- Request compression
- Request content filter
- And more

Other upcoming webinars

- Troubleshooting and Identifying Issues using FusionReactor 6 – TBA
- Getting the Most out of FusionReactor Ultimate – TBA
- FusionReactor CLOUD – TBA
- Registration: www.fusion-reactor.com/webinars
- Recordings of past webinars also offered there

Other FR resources

- **FR web site: fusion-reactor.com**
 - Downloads
 - Docs, videos, technotes, forums, and much more
- **Email: sales@fusion-reactor.com, support@fusion-reactor.com**
- **Phone: (978) 496-9990 (sales)**
- **Consulting assistance: cfconsultant.com**
- We welcome your feedback on these or the other webinars, or any you would like to see

Questions & Answers