



## OVERVIEW

FusionReactor is designed for production Java applications and provides instant code level insight into application performance bottlenecks and poorly performing database queries.

FusionReactor is the #1 monitoring solution for Adobe Servers and used by over 5,000 companies worldwide and is running on over 35,000 production servers.

## LICENSING

FusionReactor is a hybrid monitor and is available as an on-premise and SaaS (cloud) solution.

Different types of license are available to cover everything from on-demand subscriptions to one-time, on-premise licenses.

# Essential Monitoring and Observability for Developers, DevOps and Application Support

FusionReactor is a low overhead, real time Java application performance monitoring (APM) tool which gives developers, DevOps and application support unrivalled, deep insight into exactly how applications perform and execute at production run-time.

APM tools have emerged as a category to help businesses address issues when applications break or systems are slow. Unfortunately, even though most of those tools will tell you what's going on, they don't do enough to tell you why things are broken so you can accelerate time to fix.

FusionReactor takes a different approach – we not only provide the basics and core APM expectations that every user has for monitoring, such as measuring detailed metrics, analysing resources such as memory and CPU and alerting. FusionReactor also includes a suite of low overhead, production safe and secure analysis tools which would typically only be available in a development environment. These include automated error detection, production runtime tracing and debugging capability and a suite of performance profiling tools, including a code, thread, CPU and memory profilers.

These tools provide developers and DevOPS with a unique level of insight into what's really happening in production as issues and performance problems unfold. This capability will ensure that issues can be addressed and fixed in the shortest possible time.

“When something breaks, or performs poorly in production, developers need real-time insight and transparency into what applications are doing at the point that they're breaking”

David Tattersall, CEO of Intergral GmbH, makers of FusionReactor.



## PLATFORMS & TECH

### Java Application Servers –

Tomcat, JBoss, WildFly,  
Oracle Weblogic, IBM  
WebSphere, Adobe ColdFusion  
**Frameworks –** Spring Boot,  
Struts, Play, Grizzly, Jersey,  
JSF, Vaadin, VertX, Micronaut

**Databases –** MS SQL Server,  
MySQL, PostgreSQL, Oracle,  
Cassandra, MongoDB, Apache  
Derby, Redis, H2

## TECH SUPPORT

FusionReactor is a Java agent  
– so installation is quick and  
simple. As well as providing a  
range of “how to” videos, we  
also offer free technical  
support to assist installation on  
our supported platforms.

For more information on  
FusionReactor please go to:  
<https://www.fusion-reactor.com>

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# FusionReactor includes low overhead, production safe, profiling tools

## Transaction Details

Main	Headers	Cookies	JDBC	Properties	Relations	Profiler
Profiling Started						11-Feb-20 10:37:43.992
Duration (ms)						35,290
State						Finished
Samples						162
Thread Id						0x52 (82)
Thread Name						http-nio-8080-exec-10
<div>▼ 100.0% - 35.291s java.lang.Thread.run(Thread.java)</div> <div>▼ 48 Collapsed Methods (show)</div> <div>▼ 100.0% - 35.291s com.integral.fusionreactor.test.db.dao.DirectDAO.generate(DirectDAO.java)</div> <div>▼ 81.7% - 28.816s com.integral.fusionreactor.test.db.dao.DirectDAO.addEmployee(DirectDAO.java)</div> <div>▼ 74.2% - 26.186s com.integral.fusionreactor.test.db.dao.DirectDAO.getConnection(DirectDAO.java)</div> <div>▼ 74.2% - 26.186s com.integral.fusionreactor.test.db.dao.DirectDAO.getConnection(DirectDAO.java)</div> <div>▼ 74.2% - 26.186s com.integral.fusionreactor.test.db.dao.DirectDAO.getConnection(DirectDAO.java)</div> <div>▶ 66.8% - 23.562s java.sql.DriverManager.getConnection(DriverManager.java)</div> <div>▶ 7.4% - 2.624s com.integral.fusionreactor.test.db.dao.DirectDAO.checkTables(DirectDAO.java)</div> <div>▼ 7.5% - 2.629s com.integral.fusionreactor.test.db.dao.DirectDAO.runAdd(DirectDAO.java)</div> <div>▶ 3.4% - 1.210s com.mysql.jdbc.ConnectionImpl.commit(ConnectionImpl.java)</div> <div>▶ 2.3% - 807ms com.mysql.jdbc.ConnectionImpl.close(ConnectionImpl.java)</div> <div>▶ 1.2% - 408ms com.mysql.jdbc.PreparedStatement.executeUpdate(PreparedStatement.java)</div> <div>▼ 0.6% - 204ms com.mysql.jdbc.PreparedStatement.setString(PreparedStatement.java)</div> <div>▼ 0.6% - 204ms com.mysql.jdbc.PreparedStatement.setString(PreparedStatement.java)</div>						

Common application problems in Java tend to be related to poorly performing service calls, memory leaks and thread locks, which if neglected, will stretch resource utilization beyond limits, causing applications to slow down or even crash.

FusionReactor Ultimate and Developer Editions include a number of profiling tools, which are designed for production usage and which can dramatically help developers, DevOps and support to detect such problems and help to optimize Java applications.

- **Code Profiler** : See application code performance issues as they happen. Gain instant insight into CPU and method execution time, recorded in actual time spent in method and percentage of total time (example shown above)
- **Memory Profiler** : Real-Time heap analysis, provides in-depth insight into potential memory leaks and excessive object creation
- **CPU / Thread Profiler** : Can be used to detect thread contention and dead-locks and see how much CPU has been used by individual threads. Running threads can be instantly profiled or have a stack-trace dump generated