AgitarOne Agitator for Java

Develop Better Software, Faster

Agitar's solutions are designed to help you work safer, better, and smarter as you develop and maintain Java applications. AgitarOne Agitator® is optimized for new code or "greenfield" applications, helping you reduce complexity and detect bugs as code is written or modified. AgitarOne JUnit Generator is focused on existing Java applications, helping you more quickly and easily change existing applications to meet changing business needs, prevent regressions, and reduce your overall cost of maintenance and enhancement.

Most Java Development Teams Face the Same Challenges

Quality: Releases have more bugs than you'd like, leading to longer and more expensive QA cycles, and more bugs delivered to end users.

Time-to-market: Unpredictable QA cycles result in missed deadlines, or releases delivered on schedule only by compromising quality and backtracking on committed functionality.

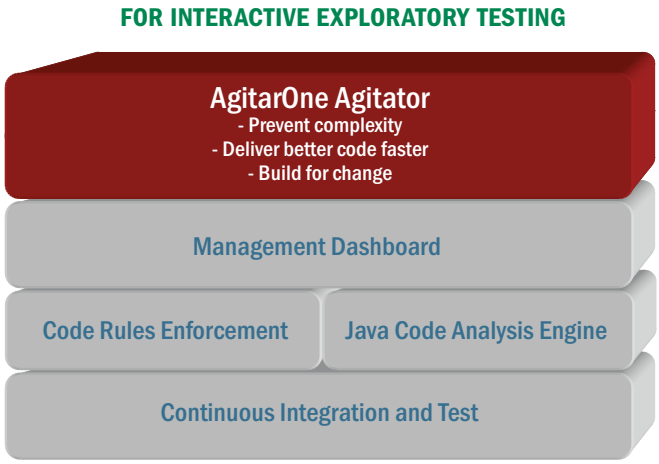
Maintenance Costs: Bugs that are not caught early in the development cycle cause maintenance costs to escalate.

What can you do on new code to accelerate time-to-market, enhance quality, and reduce maintenance costs?

AgitarOne Agitator is the Solution

Unit testing — the practice of testing code as it is written — is a proven way to help development teams detect bugs as code is written, when it's fastest and cheapest to do so. Most development teams practice some degree of manual unit testing. However, to really unit test code, every line, every branch, and every outcome must be tested. That's a daunting problem — it's not practical to create such exhaustive tests manually. Built on software agitation®, Agitar's breakthrough innovation for exhaustive unit testing, AgitarOne Agitator enables interactive exploratory testing on your Java code, complementing your hand-written unit tests and helping you make sure your Java code works correctly.

Product Overview



Interactive Exploratory Testing

AgitarOne Agitator relies on software agitation, powered by Agitar's Java code analysis engine. Software agitation automatically generates a broad and varied set of test data to exercise the code with unprecedented coverage and thoroughness. Agitation results are presented as a short list of observations, which are reviewed by the developer. If an observation is what the developer intended, the developer can promote it to an assertion with one click; otherwise, the developer can immediately fix the code. Assertions describe expected code behavior that should occur under all circumstances, and also serve as durable regression tests that continue to validate correct behavior as the code changes. A developer can also manually create an assertion and validate that it is true in all cases. Subsequent agitations verify all assertions and report success or failure. Developers can agitate their code frequently as they work on it, since agitation gives them near-instantaneous feedback on the code's behavior.

Product Overview

Code Rules

AgitarOne Agitator includes automated enforcement of Java code against a customizable set of rules, standards, and guidelines. Code rules ensure compliance and quickly detect many common errors that can then be fixed with minimal effort and risk. When you want to improve existing applications, the code rules will flag complex code so that you can focus your effort on refactoring the code that needs it the most.

Management Dashboard

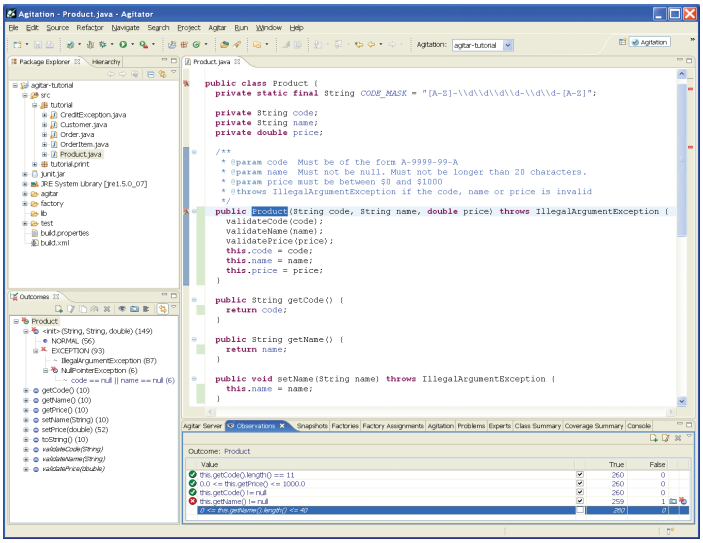
AgitarOne Agitator includes dashboard reports that provide comprehensive feedback to empower developers and to help manage, track, and report on your project.

Continuous Integration and Test (CIT)

AgitarOne Agitator includes built-in support for continuous integration and testing based on CruiseControl, the popular open-source solution. Agitation assertions can be combined with JUnit tests — whether hand-written or generated by AgitarOne JUnit Generator — to create a thorough set of regression tests. AgitarOne's CIT functionality can then help you run these regression tests as often as possible to get the maximum benefit. Following code check-ins, AgitarOne automatically rebuilds the application, runs the regression suite, and reports back on the status.

For more details on code rules, dashboard reports, and CIT, see the AgitarOne JUnit Generator datasheet.

AgitarOne Agitator Feature Summary



Interactive Exploratory Testing

- Enables exploratory testing by presenting observations about code behavior under a wide range of inputs
- Developers promote observations to assertions with one mouse click
- Assertions are dynamic, and revalidated with relevant new data when the code changes
- Developers can write their own assertions for agitation to validate
- Smart mock object support provides unprecedented functionality and coverage
- Domain Experts simplify testing using common Java frameworks

Supported Platforms and System Requirements

Operating Systems: Windows 2003 Server, Vista, 2008 Server, 7, 8, Server 2012; Redhat Linux 4 or newer; 64-bit Mac OS X 10.6 (snow leopard) or newer
Browsers: Internet Explorer 9 or later; Firefox 1.0 or later
JDKs: Sun 1.6 - 1.8; IBM 1.6 - 1.8
IDEs: Eclipse 3.6 to 4.3 compatible; including RAD, RSA, JBuilder
Hardware: Recommend dual core CPU and 4G RAM minimum for server

To find out more about how AgitarOne can help you produce faster, better, and more flexible code, visit www.agitar.com.

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