

LiveRecorder Data Sheet

undo™

Record. Replay. Resolve.

LiveRecorder provides software engineers with a powerful Record and Replay toolkit that enables the acceleration of software defect detection and resolution.

By eliminating the usual guesswork involved in software failure diagnosis, LiveRecorder significantly accelerates Time to Resolution (TTR) compared to traditional methods of debugging.

50%
of software engineers' time is still spent debugging

91%
of software developers admit to having unresolved defects because they cannot reproduce them*

PROBLEMS	SOLUTIONS
<p>Test failures can result in deployments being full of ticking time bombs.</p>	<p>LiveRecorder efficiently records a program's execution down to instruction level and saves it to disk. A recording supplies all the context needed for developers to rapidly determine root cause.</p>
<p>Hard to reproduce, intermittent, software failures. Recreating the conditions under which the software failed can be near impossible.</p>	<p>With a LiveRecorder recording, no time is wasted trying to reproduce the failure. The recording already contains all the information a developer needs in order to see what the process did and why.</p>
<p>Traditional caveman debugging techniques (printf, logging etc) rely on a lot of guesswork. They are needlessly time-consuming as you build and test multiple hypotheses all whilst reproducing the failure over and over again.</p>	<p>LiveRecorder includes a powerful integrated time travel debugger. Play recordings forward and backward to analyze internal program state – using logical deduction to be certain of where you are looking next and with the ability to trace program flow back for rapid root cause analysis.</p>

Key features



Supported Languages: C/C++, Go, Java applications on Linux x86 and x86_64. Compatible with all mainstream Linux distributions.



Seamless integration into your Linux program & development workflow via command-line recording, API control & IDE integrations (Eclipse, Clion, Golang, Emacs, IntelliJ).



Multi-process correlation reveals the order in which processes and threads alter data structures in shared memory.



Handles multi-threaded programs and those that use shared memory & asynchronous I/O.



Thread-fuzzing randomizes thread execution to reveal race conditions and other multi-threading defects.



Faster than you think. Expect a 2x to 5x slowdown. Only record failed processes (not all of them) and record them only once to get all the data you need to debug.

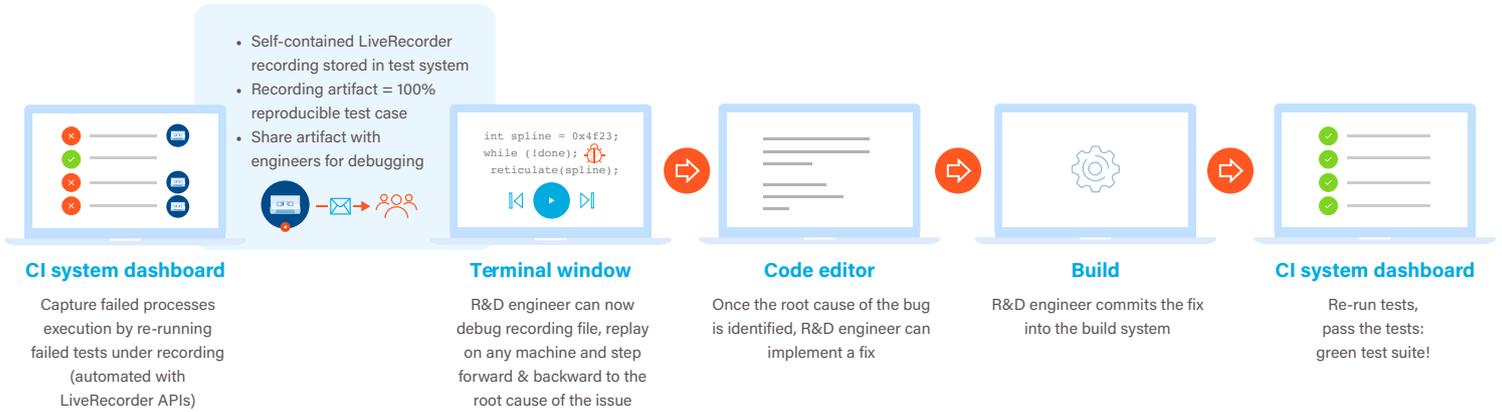
*Reproducibility is the fundamental problem in software defect resolution.

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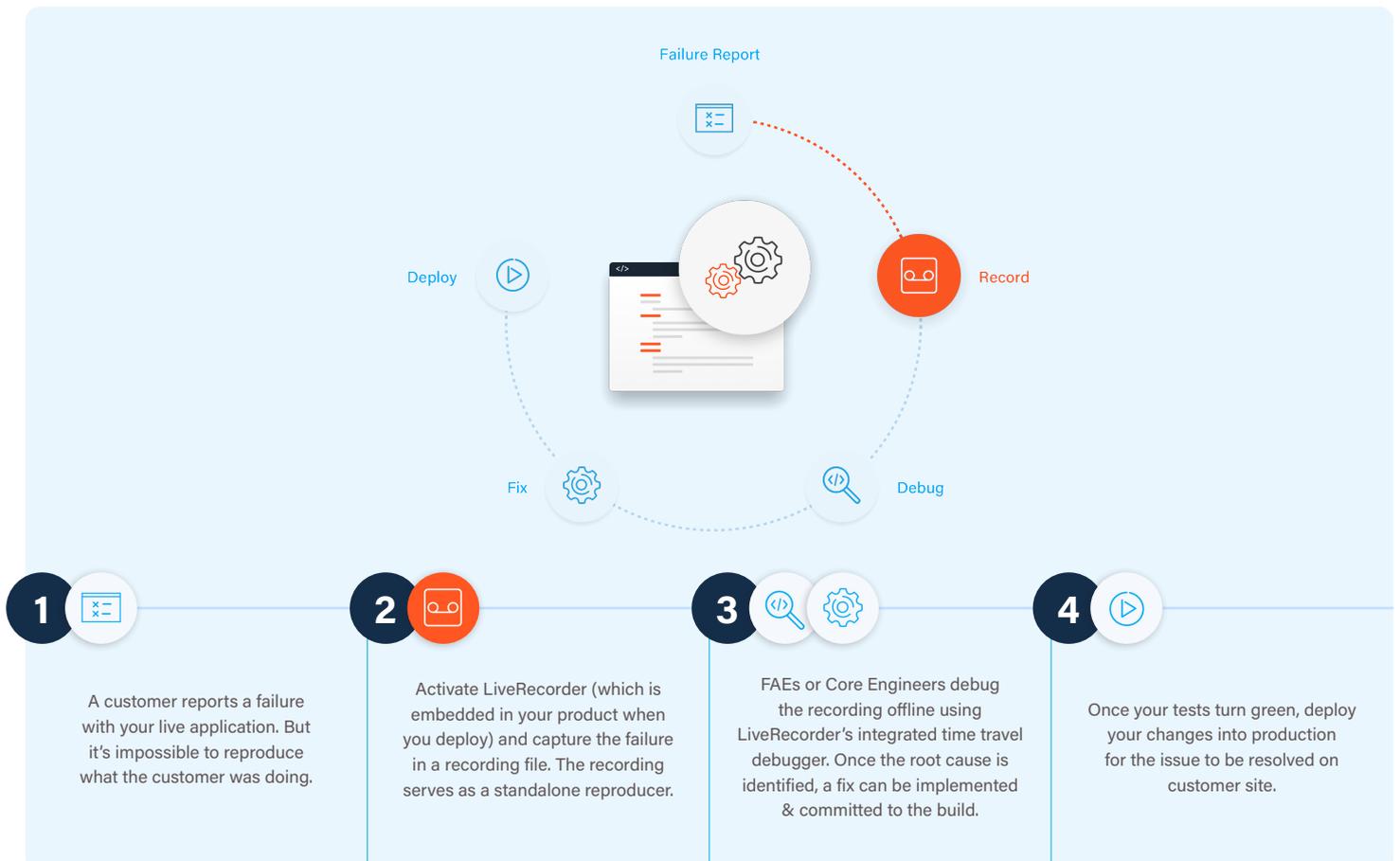
LiveRecorder for development and test

Software development testing and quality assurance is “shifting left” to earlier stages of development. LiveRecorder can be deployed to accelerate bug resolution across all phases of the software development lifecycle. Here’s how, for example, LiveRecorder can fit into your CI workflow.



LiveRecorder for production

If the software fails in production, reducing Time to Resolution is essential to minimizing customer disruption. Here’s how LiveRecorder enables developers to simply record the failing software (providing the full reproducer) and to analyze and debug the recording without disrupting the live environment.

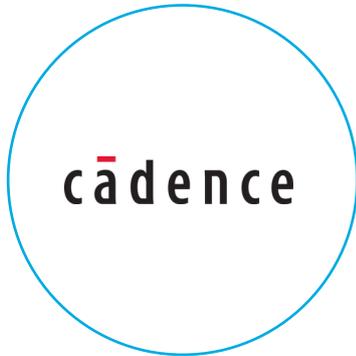


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Our valued customers

Trusted by the world's leading enterprise software vendors



JUNIPER

Resolving complex issues on their networking operating system, JunOS to support their enterprise switches and routers

SAP

The main technology used to identify failures in the SAP HANA database when they run it through stress tests

SIEMENS EDA

Used externally to resolve customer issues in their Catapult and Verification products and internally as part of hundreds of engineers' debugging flow

About Undo

Undo is the leading Software Failure Replay platform provider for engineering teams building complex systems. Our flagship product, LiveRecorder, is used to fix bugs faster, accelerate product delivery, and boost engineering resource efficiency.

Undo's platform is trusted by leading technology organizations to record, replay and rapidly resolve quality issues in complex applications fast. This allows them to accelerate software delivery and to resolve customer issues faster.

For more information, visit us online at undo.io