

# LiveRecorder Data Sheet

undo™

## Record. Replay. Resolve.

LiveRecorder provides software engineers/ DevOps 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 Mean Time to Resolution (MTTR) compared to slower 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

PROBLEM	SOLUTION
Increasing software application architecture/ orchestration <b>complexity</b> makes observability a challenge.	LiveRecorder provides better observability and <b>visibility into what a failing process actually did.</b>
<b>Test failures</b> can result in deployments being full of ticking time bombs.	<b>LiveRecorder records a program's execution down to instruction level.</b> A recording supplies all the context needed for developers to determine root cause quickly.
<b>Hard to reproduce, intermittent,</b> software failures. Recreating the conditions under which the software failed can be near impossible.	A LiveRecorder recording <b>eliminates the need for reproducibility</b> by providing a 100% reproducible test case of a software failure ready for analysis & debugging.
<b>Traditional caveman debugging techniques</b> (printf, logging etc) rely on a lot of guesswork and are needlessly <b>time-consuming.</b>	LiveRecorder includes a powerful integrated reversible debugger. Play recordings forwards and backwards to analyze internal program state.

## 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 etc).

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

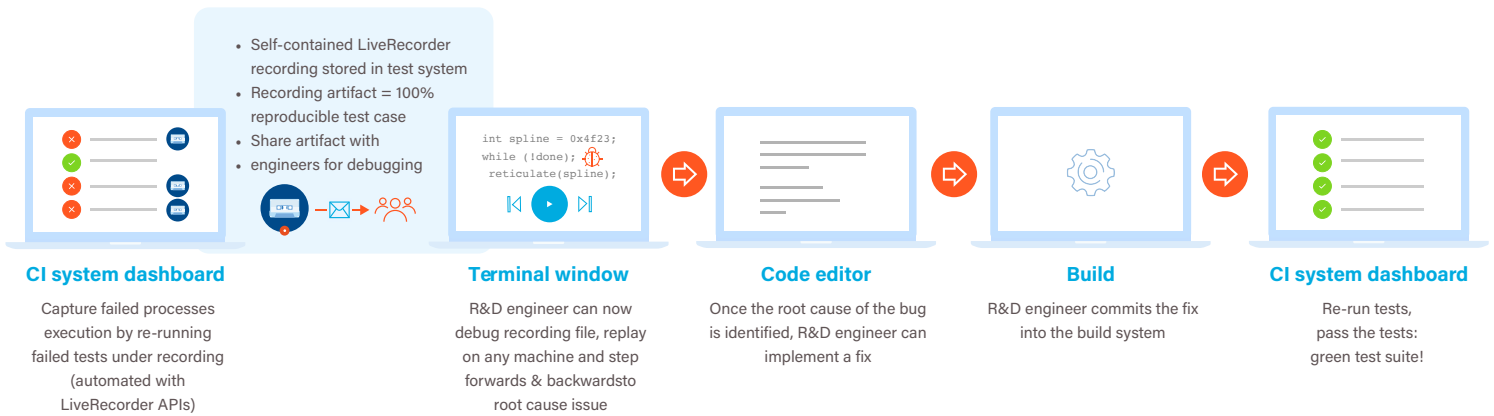
Handles multi-threaded programs and those that use shared memory & asynchronous I/O.

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.

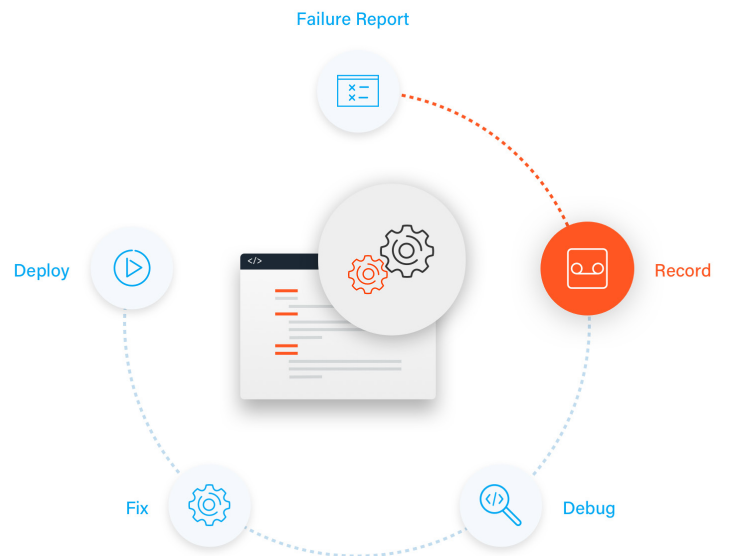
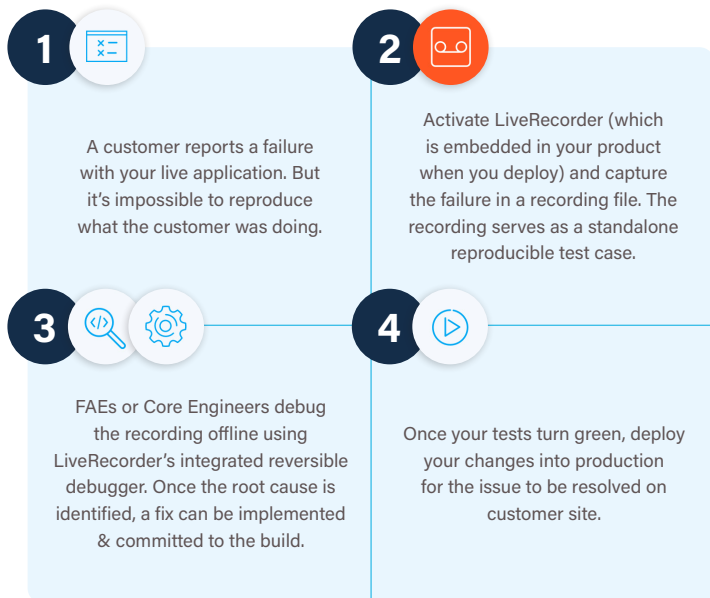
# LiveRecorder for Development

Software development testing and quality assurance is "shifting left" to earlier stages of development. LiveRecorder can be deployed to accelerate bug defect 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 software fails in production, reducing MTTR is essential to minimizing customer disruption. Here's how LiveRecorder enables developers to simply record the failing software (no reproducibility needed) and to analyze and debug the recording without disrupting the live environment.



# Trusted by Industry Leaders



# Undo: Making Software Reliable

Undo is the leader in software reliability solutions based on Software Failure Replay Technology. Our flagship product, LiveRecorder, accelerates Mean Time to Resolution, across all phases of the software

development lifecycle, by eliminating the guesswork in defect diagnosis. Built for mission-critical software, Undo's products are trusted by the world's largest technology companies to record, replay and resolve

problems in complex applications fast. This allows them to accelerate software delivery and to resolve customer service issues faster.

For more information, visit us online at [undo.io](https://undo.io)