riverbed

White Paper

Performance Engineering for Applications

Develop, Deliver and Support High Quality Applications

Overview

Ensuring application performance and quality is a shared responsibility across all groups within IT. Poor quality impacts IT and business performance, and increases incurred costs of maintenance. See how you can:

- Establish collaborative processes to identify and resolve bugs and performance problems early in the application lifecycle
- Expedite release cycles and ensure optimal end user experience

The Importance of IT Today

Businesses and users today have rapidly evolving needs, are mobile, and expect 24/7 connectivity and reliability. We rely on IT teams to provide functionality and service to keep up with market needs all while ensuring reliability. Fail to do so, and users switch to competitors or other alternatives. Real world examples are all around us. Banks with superior online banking services are stealing customers from the laggards. Similarly, FedEx and UPS have left the US Postal Service in the dust by leveraging state-of-the-art systems and logistics.

The ability to constantly adapt to meet market needs is vital. However, with rapid application release cycles, the quality of code and associated deliverables can take a hit and make maintenance in production expensive and a nightmare.

The Cost of Poor Performance and Quality

Expediting release cycles alone—from design to production (a.k.a. application development lifecycle)—is not a solution for ensuring that the latest and greatest features make it to end-users. Without assuring quality across the lifecycle, releases can be buggy, result in poor performance or outages, and be expensive to maintain.

From Figure 1 you can see that IT organizations greatly benefit from finding and resolving bugs early in the lifecycle. A bug that costs $6.50 dollars to fix in testing can cost $100 to fix if found in production.

How do we ensure quality early and across the lifecycle? Read on.

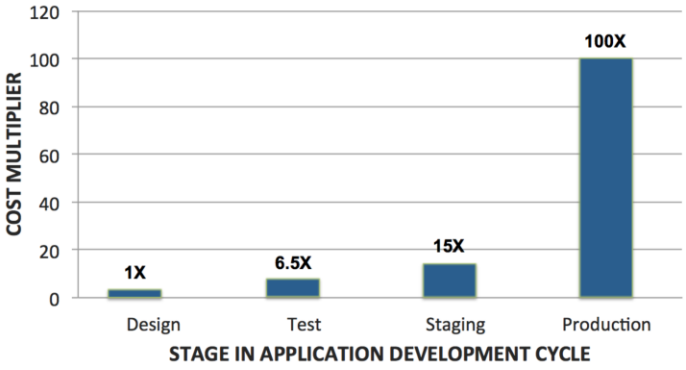

Figure 1: Identifying App Issues Early Reduces Costs
(Source: IBM Systems Sciences Institute)

"We're now able to look inside of the developers' code—without having to modify the code—while it's running in our production environment. That's fantastic. I can't imagine someone running a site of any real size without this capability."

Eric McCraw
Global Web Systems Manager for IT
National Instruments

Performance Engineering

Quality Driven Application Development and Delivery

Ensuring quality and performance is a shared responsibility. With Application Performance Monitoring (APM) solutions, development, testing, operations and business stakeholders get performance visibility, share insights and collaborate in order to ensure fast release cycles while ensuring quality. Finding issues early help keep costs down.

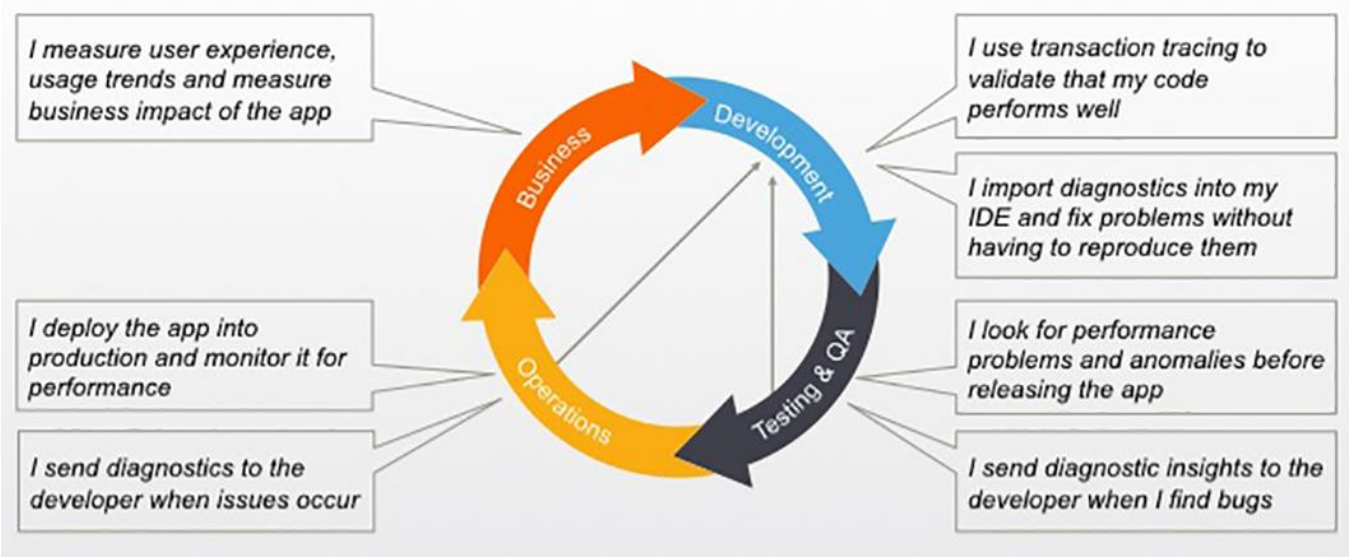

Figure 2: IT and business stakeholders share performance insights to find and fix issues early.
This results in effective collaboration, higher quality and faster releases.

APM solutions like SteelCentral AppInternals, continuously monitors applications to:

- Measure user experience and trends from users' devices
- Trace all transactions from the user, across the network, and into physical, virtual or cloud-based datacenters
- Expose and diagnose issues down to the level of code, SQL or server to fix them quickly and decisively

As a result:

- **Developers** can ensure that their code performs optimally the first time they write it, and with deep transaction tracing, can fix production issues faster without having to reproduce them. This frees up time to focus on new development as opposed to routine maintenance.
- **Testing and QA** can ensure that they not only identify bugs, but also capture diagnostic data at the time of failure that developers can use to fix issues quickly.
- **Operations** teams can ensure that new releases perform as well as the previous ones during release windows. While in production, they can monitor end user experience, detect and diagnose performance problems and gather insights that can help resolve issues quickly.

APM solutions eliminate blind spots along the application delivery chain, and arm the right team with the diagnostics they need to resolve performance problems quickly and effectively. Customers report having achieved 10X faster mean time to resolution.

Get Started

See How SteelCentral AppInternals Can Help You

Never Miss a Performance Problem

Monitor user experience, applications, infrastructure, and key business transactions from an interactive Web-based dashboard.

You're only two clicks from an answer to virtually any application performance problem you observe or are alerted about.

Reconstruct and Diagnose Incidents in Great Detail

Trace every transaction from user device or browser to the application backend, and capture second-by-second system metrics.

Reconstruct and analyze incidents in great detail to fix code, SQL, infrastructure, or remote calls.

Try SteelCentral AppInternals Now!

Go to www.appinternals.com and try AppInternals for free. No installation required!

About Riverbed

Riverbed, at more than $1 billion in annual revenue, is the leader in application performance infrastructure, delivering the most complete platform for the hybrid enterprise to ensure applications perform as expected, data is always available when needed, and performance issues can be proactively detected and resolved before impacting business performance. Riverbed enables hybrid enterprises to transform application performance into a competitive advantage by maximizing employee productivity and leveraging IT to create new forms of operational agility. Riverbed's 26,000+ customers include 97% of the *Fortune* 100 and 98% of the *Forbes* Global 100. Learn more at riverbed.com.