6 Ways New Relic Can Help You Do DevOps Better

DevOps combines collaboration and transparency to speed development, implementation, and innovation throughout the organization. But for DevOps to drive business success, teams must collect and share critical data in real time across the entire organization—from the performance impact of the latest code release to the percentage of downtime during the latest traffic spike. Of course, that’s just the beginning: For DevOps efforts to truly pay off, you need to show key stakeholders that your work has a positive impact on your business. Here are six ways New Relic can help you move faster and ensure your DevOps initiatives are working.

1. Get everyone on the same page.

Running a digital business is a team sport, with involvement across development, operations, and business teams. However, as the rate of change increases in DevOps environments, these diverse teams often get out of sync because they rely on different data sources and tools. New Relic charts, dashboards, and alerts can create a single, powerful, and easy-to-understand source of truth for stakeholders across the company. That can mean sharing dev and ops perspectives using New Relic Insights dashboards or tracking environment health status via Service Maps in New Relic APM, which can speed top-level troubleshooting by providing a single pane of glass that highlights throughput, error rate, and latency for every connected service. New Relic Infrastructure meanwhile, can surface server issues that are affecting performance, and you can use New Relic Synthetics scripts to monitor SLA compliance by checking if the app is meeting at agreed-upon uptime goals.

It’s easier to understand each other when you’re looking at the same data.
2. Use Dynamic Baseline Alerts to get started fast.

Given the hundreds of moving parts you need to track in modern software environments, it can take a long time for teams to figure out alert thresholds for them all. Whether you're dealing with code metrics, database metrics, hardware metrics, or business metrics, Dynamic Baseline Alerts help you automatically set useful initial baselines for all your metrics, without having to do research. Then you can refine them further over time to find the sweet spot that flags problems that could affect customers without waking you up with false positives. DevOps is about shared responsibility across diverse teams, and alerts can help everyone involved take a vested interest in the status of the application.

3. Keep an eye on the container stack.

To truly understand what's going on with your apps, you need insight into your entire technology stack, from the infrastructure to the code to the user interface to the customer experience, on the web or on a mobile device. Increasingly, that includes container technologies like Docker, which help DevOps teams build and deploy distributed applications that can run anywhere. Unfortunately, containers can also create a blind spot for monitoring as many containers live only for a few minutes or less, not long enough for traditional monitoring to notice their existence. Use New Relic's Docker monitoring to illuminate that blind spot with an app-centric view of the relationships between applications, servers, and Docker containers, helping bring context to the tracking of short-lived containers.

4. Track changes across the deployment pipeline and infrastructure.

When using continuous integration/continuous deployment, the rapid pace of change can obscure the complex effects of any given update. New Relic can give you full-stack visibility into the real-time impact of changes at every layer of your app, from customer experience to code and containers. Deployment Markers in New Relic APM, for example, help you track when change events happen—even if they're not instrumented in New Relic—and what was impacted, from the end-user experience to application performance. New Relic Infrastructure, meanwhile, adds change and performance monitoring to capacity and utilization issues—all married in the same interface. You can also use Insights dashboards to measure everything from deploys per engineer/team and number of deploys to specific apps or failed and successful deploys.

5. Master Game Days.

Game-day simulations are a great way to test the limits of your system. But what's the best way to find out if the processes in your runbooks are robust enough to survive various problems, and how do you validate your production steps under load? Just as important, how do you track the effects of the stress tests you conduct? For the former, Game Day "Red Teams" can use New Relic Synthetics to simulate problematic traffic scenarios and try to break things. The "Blue Team," meanwhile, can rely on the entire New Relic Digital Intelligence Platform—particularly New Relic Insights dashboards and New Relic APM alerts—to help track what's happening in real time, determine solutions, and make sure they're actually solving the problem.

6. Tie software performance to business goals.

As with any transformation effort, for your DevOps efforts to be a true success, you need to show more than better software results. You need to demonstrate positive business benefits. That can be more complicated than you think. One specific change, for example, might cut response time (which is usually good) but also reduce conversions (which is pretty much always bad). Using New Relic Insights, you can create dashboards to track not just software performance, but business metrics like conversion rates, average revenue per user, customer acquisition costs, churn rates, subscription renewals, and recurring revenue. Shared goals help everyone relate their work to a measurable set of indicators of success. This data-driven approach can improve prioritization and decision-making.

If your software engineers don't know what a conversion rate is, you probably aren't DevOpsing!

Want to learn more about turbocharging your DevOps transformation? Visit www.newrelic.com/devops.