



Wayfair speeds up DevOps CI/CD pipeline, cutting integration times by 95%

Wayfair is a leading online retailer, offering shoppers a selection of more than 10 million items spanning home furnishings, décor, home improvement, and housewares. The Wayfair family of brands includes Wayfair, Joss & Main, AllModern, Birch Lane, and Perigold. Headquartered in Boston, Massachusetts, the company has annual revenues of \$5.7 billion and employs more than 9,700 staff.

DevOps performance is critical

As one of the world’s fastest-growing e-commerce businesses, Wayfair depends on innovative technology. The company operates award-winning websites where customers can discover and purchase products that let them live in a home they love. To provide this compelling customer experience, Wayfair relies on a team of DevOps engineers that enable its software community to deliver over 300 releases every day—or an average of one every five minutes.

Operating at this phenomenal pace requires highly optimized continuous integration and delivery (CI/CD) pipelines. Every development second counts, whether committing code to Git, integrating using Jenkins, testing with Codeception, or deploying with Artifactory and custom pipelines. Once code is deployed, operations needs to be just as agile—an equal voice in the DevOps mantra of “release fast, fail fast, and revert faster.”

Performance optimization requires end-to-end visibility

To optimize DevOps performance, Wayfair needed complete visibility of its end-to-end pipeline and operations. According to Tameem Hourani, Wayfair’s Director of Production Operations, “We have a state-of-the-art DevOps pipeline, but we didn’t know how well it was performing or why. We had information from individual tools, but nothing to bring this together. We needed a single system where we could correlate and analyze this data—one pane of glass where we could see everything that was happening across the many tools in our pipeline and in production monitoring.”

Hourani gives an example—revert times. “To speed up revert times, operations needs to know what code—if any—has changed. For instance, if there’s a slowdown in website response time, they need to know right away which related software deploys,

Highlights

Wayfair leverages ServiceNow to optimize DevOps CI/CD pipeline speed and quality

Headquarters

Boston, MA

Geographies

North America, Europe

Employees

9,700

Industry

Retail and consumer products

Challenges

- Optimizing DevOps pipeline performance
- Establishing end-to-end visibility across DevOps tools and production monitoring tools

Solutions

- ServiceNow® ITSM
- Now Platform®

Results

- Cut production rollbacks by 50%
- Reduced revert times from 12 minutes to 2 minutes
- Lowered integration times by almost 95%

if any, have just been deployed to production. Otherwise, they don't know what to revert. And, if nothing has changed, it could be an issue with another component of the web stack, such as load balancers, web servers, etc. If you want to bring down revert times, you need this visibility—not just monitoring infrastructure, but information further back in the CI/CD pipeline.”

ServiceNow delivers insights across the DevOps toolchain

To help stitch together this data from multiple systems, Wayfair chose ServiceNow. Hourani says, “We could have started from scratch by bringing all of our tool metadata into a warehouse. However, ServiceNow gave us far faster time-to-market. It was easy to integrate with our tools, and we could leverage its built-in ITSM capabilities—such as incident and change records. Instead of building a completely new application, we could simply add what we needed to ServiceNow. And, we could develop this additional functionality much more quickly using the Now Platform.”

Wayfair started by integrating its monitoring tools into ServiceNow, followed by its CI/CD toolchain. Hourani says, “We had multiple monitoring systems, so our operations team wasted time juggling tools. We integrated all of these with ServiceNow, giving us a consolidated view across our web stack infrastructure, applications, and services. Now when there's an issue, ServiceNow pushes out a Slack notification. Our operations team then analyzes the logs in Kibana and correlates these with recent software changes. The result? Since we started using ServiceNow, revert times have dropped from 12 minutes to two minutes.”

50% reduction in revert rates

By creating a strong bridge between development and operations, Wayfair has also improved release quality. Hourani explains, “We don't just see what has happened. We see why. For example, when there's a spike in incidents, we use data in ServiceNow to track this back to specific test suites and even specific code changes. Then, we revise our tests to reduce the number of issues making it into production, and we also use this as an opportunity to improve our test suites for specific applications. Again, the results are clear—within six months of starting to use ServiceNow, our revert rate dropped from 9% to 4.5%. In other words, we cut the number of production code rollbacks in half.”

Integration times slashed by 95%

Insights from ServiceNow have also allowed Wayfair to accelerate its CI/CD pipeline dramatically. Hourani says, “We can now accurately profile the performance of our toolchain and processes—and we can drill into the details to understand the reasons for that performance. For example, ServiceNow showed us that our integration times were high, and it helped us to identify the bottlenecks. This allows the development platforms team to know which areas of the pipeline to focus on, and that allowed us to lower our integration times from 32 minutes to two minutes. That's nearly a 95% reduction.”

The bottom line

According to Hourani, “Wayfair has an ever-growing DevOps culture that is constantly learning from the DevOps ecosystem and knowledge our engineers bring to the table. It's one of the key reasons we are able to continuously improve our engineering platforms and technology stacks. ServiceNow gives us the insights we need to drive continuous improvements across our production operations stack. The results speak for themselves—quicker delivery, better code quality, and far less downtime.”



ServiceNow gives us the insights we need to drive this continuous improvement. The results speak for themselves—faster delivery, better code quality, and fewer outages.

– Tameem Hourani, Director of Production Operations, Wayfair

