

Yellow Pages Group Improves Application Performance by 20% with Help from New Relic

Yellow Pages Group (YPG) is a leading digital media and marketing solutions company in Canada. The company serves Canada's small business marketing needs through its nationwide sales force of media consultants. YPG also caters to the country's largest national agencies and advertisers through Mediative, its national digital advertising and marketing solutions division. YPG is held by Yellow Media Limited (TSX: Y), which owns and operates some of Canada's leading properties and publications including YellowPages.ca™, Canada411.ca, RedFlagDeals.com™, Yellow Pages™ directories, and Yellow Pages and ShopWise mobile apps.



Industry

Marketing & Advertising

Location

Verdun, Quebec

Employees

Approximately 2,800

Use Case

Comprehensive insight into complex ecosystem serving 15 million users per month

Why New Relic

Robust, easy-to-use monitoring for web and mobile applications through a single platform

Highlights

- Reduced troubleshooting time from days to minutes
- Improved application performance for end users by 20%
- Enabled YPG's new DevOps department to pursue a more agile approach to application deployment

The YPG Environment

YPG's dozens of web properties run a variety of languages—including PHP, .NET, Java, and Ruby—on a common API. All mobile applications are designed for a variety of operating systems, including iOS, Android, BlackBerry, and Windows Mobile.

Rapid Growth Leads to Poor Visibility

YPG has seen a tremendous amount of change in recent years. "It's been a challenge to transform from a print company to a web-based company," says Alain Gaeremynck, Senior Enterprise Architect and DevOps Manager at YPG. "As we've expanded into new channels—including social and mobile—we've encountered the inevitable messiness that results from rapid growth." For example, many of YPG's initial applications were deployed in a fairly ad hoc manner, running on different technologies, which made it difficult to integrate all of the properties into a single view.

As web traffic began to grow exponentially from one month to the next, YPG's challenges became more acute. "Our websites attract approximately 8 million unique visitors per month, and with mobile, it's around 15 million," says Paul Ryan, CTO at YPG. "That's a major web and mobile presence in a country with only 35 million people. Before New Relic, we diagnosed web performance issues using tracing and logging, which bogged down the server because it used a ton of I/O. It was time-consuming guesswork, and it essentially left us in the dark."

Web Monitoring Uncovers Powerful Insights Across the Organization

When Paul came to YPG in 2012, he immediately recognized the need for a robust application monitoring solution. Whenever developers released a new version of a website, they would inevitably encounter problems and need to roll everything back. "I'd used New Relic for several years in a prior position," he says. "I knew that the technology could help us be more proactive."



Startling insights soon followed. “Within two days of using New Relic on yellowpages.ca, we discovered four or five fairly simple fixes that had gone unobserved because we didn’t have the tools to observe them,” says Paul. “New Relic gave us a complete snapshot of our environment so that we could spot those issues at a glance.”

The Service Map feature has been especially helpful in diagnosing issues quickly and accurately. “Our systems are code-dependent, and there’s a hierarchy to them,” says Alain. “With the Service Map, I can tell right away which subsystem is causing any given problem. We also rely on the profiling features to look at individual transactions and figure out the source of pernicious memory leaks.”

“New Relic is the critical tool we use to amp up the speed and relevance of our many consumer web sites and mobile applications.”

Paul Ryan

CTO, Yellow Pages Group

Developers aren’t the only ones who benefit. The YPG marketing department depends on New Relic Browser™ to see that users are getting a high-quality experience. They also use the Service Map to generate critical data for conducting negotiations with suppliers who might not be meeting SLAs. “We even have people on our operations team using New Relic to validate network issues, like when the network layer is showing an increase in size,” says Alain. “The bottom line is that the New Relic Platform isn’t just for developers. It’s intuitive enough to deliver value across the organization.”

Mobile Monitoring Provides Performance Data by Version, Platform, and Network

With mobile usage rising steeply, YPG has developed a family of mobile apps to meet consumer demand for easy-to-use tools that can provide near-instant directory information based on location. “We currently support every major mobile platform, because our goal is to get in front of as many users as possible,” says Paul. “But troubleshooting across all those different platforms can be extremely difficult—they sometimes behave very oddly in the wild.”

YPG Accelerates Development Lifecycles by Embracing DevOps

Historically, YPG followed a waterfall development model, with new software launched every few months. “That kind of heavyweight development cycle no longer works in today’s market,” says Paul. “Our goal was to transition to a scrum-based agile development model. But like most traditional IT organizations, we didn’t have the structures in place to make that work.”

To facilitate the shift to agile, YPG created a DevOps team to manage and support all development activities for web and mobile applications. In the new model, developers and system administrators work collaboratively to create an automation package for each product so that deployment can happen with the click of a button. “New Relic is at the core of our agile development and DevOps process,” says Alain. “Our QA team uses the software to validate the automated package, clearly showing us potential problems before anything hits production.”

The result is a more dynamic suite of applications with a steady stream of new features for sustained user engagement. “In our business, faster is better,” says Paul. “Obviously, though, our applications need to be functional, too. New Relic helps us accomplish both of those goals.”

With New Relic Mobile™, the YPG team can see how an app is performing by version, platform, and network, all from the end user’s perspective. “We’re not just getting a sample of how our mobile apps are performing,” says Paul. “It’s more like a census. We’re seeing actual performance across the entire user base. And with the User Interaction Traces feature, we can dig down into the specific flows that might be causing a performance issue.”

As a result, the YPG team is fixing things they didn’t even realize were broken. “We’d been testing potential user paths within these mobile apps for several years, so we’d identified almost all of the nominal cases,” says Paul. “But we’d missed a lot of edge cases. With New Relic Mobile, we can see which long-tail interactions might cause a problem. That level of insight helps us push out the highest-quality, fastest mobile apps with more frequency and more confidence than ever.”



New Relic Plugins Shows Multiple Technologies within a Single Interface

YPG uses a wide variety of technologies across a complex ecosystem—not all of which can be monitored by New Relic. “We have a lot of assets in fulfillment, and we can’t use New Relic to monitor those,” says Paul. “We also customize a lot of applications, like our TIBCO ESB. So when New Relic Plugins™ became available, we were excited to give it a try.”

New Relic Plugins offers a modular plugin architecture enabling instant visibility into metrics from multiple technologies within a single pane of glass. “We use the New Relic Plugins to monitor our many database servers, including Oracle, SQL Server, and MySQL in both real and cloud instances,” says Paul. “We also use it to keep tabs on our Hadoop environment and our Solr-based search engine. We’ve had a lot of success with the Platform so far—now it’s just a matter of finding more ways to use it.”

New Relic Strengthens YPG’s Competitive Advantage

The New Relic Software Analytics Platform saves YPG time and money. “New Relic enables me to complete tasks in a few minutes that used to take days,” says Alain. “I no longer need to read 25,000 lines of logs. I can just drill down to the one time segment that’s the source of the problem. I can also go back in time, performing historical analysis to isolate an issue that might not be identifiable using the latest data. We now spend the bulk of our time pushing out new features and providing value to our advertisers.”

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Alain Gaeremynck

Senior Enterprise Architect and
DevOps Manager, Yellow Pages Group

New Relic enables the YPG team to be far more proactive. “We no longer receive a message in the middle of the night telling us that something happened three hours earlier,” says Paul. “Instead, we’ve set up a threshold based on our Apdex score, and New Relic tells us when anything crosses that threshold. That’s huge for us, because we’re fighting against big names in a very competitive space, and the only way to win is to provide the most relevance in the least amount of time.”

“Most important to us is that YPG has improved application performance for end users by 20%,” says Paul. “That’s attributable to a number of factors, from optimizing virtual machines to streamlining code. But New Relic played a big role in making that happen—and that’s simply invaluable.”

Next Up: New Relic Insights

Paul and Alain have a lot of plans for the technology organization at YPG, but they’re especially excited about New Relic Insights, which they believe will help their teams use live application data for clear, actionable insight. “New Relic Insights will cement the relationship between Ops, Dev, and Marketing,” says Alain. “Our marketing department is itching to get their hands on it, because it will allow them to create queries that deliver answers in real time. It’s going to be awesome.”

About New Relic

New Relic is a software analytics company that makes sense of billions of data points about millions of applications in real time. New Relic’s comprehensive SaaS-based solution provides one powerful interface for web and native mobile applications and consolidates the performance monitoring data for any chosen technology in your environment. More

than 500,000 users and 11,000 paid business accounts trust New Relic to tap into the billions of real-time metrics from inside their production software — and provide answers to their important business questions. When your brand and customer experience depend on the performance of modern software, New Relic provides insight into your overall environment.

Learn More

- Learn more at newrelic.com.
- To learn more about YPG, visit: <http://corporate.yg.ca/en>.