

# On the Radar: New Relic Digital Intelligence Platform provides full-stack instrumentation

---

Application and infrastructure performance monitoring for DevOps and the cloud

Publication Date: 03 Aug 2017 | Product code: IT0022-001048

Michael Azoff

---



## Summary

### Catalyst

Application performance monitoring (APM) tools have struggled to keep up with the rapid changes and increased complexity and dynamism of modern cloud-based architectures. New Relic grew out of the need for a new-generation APM solution, and with the growth in microservices architecture and containerization it has reinvented itself to satisfy the needs of next-generation applications. New Relic offers a pure SaaS product, providing a platform of services that auto-scales without capacity constraints; it handles a wide range of digital business needs. A significant feature is the introduction of Health Map, which combines data from New Relic's application monitoring and infrastructure agents to provide a holistic view of performance.

### Key messages

- New Relic provides full-stack instrumentation – it instruments, monitors, and analyzes infrastructure, application, and end-user experience, as well as their interdependencies.
- The multitenant SaaS platform scales to support spikes in traffic and usage, processing 30 million HTTP requests and more than 600 million new data points, or more than 1 billion events and metrics per minute.
- New Relic supports real-time analytics with predefined intuitive dashboards that are customizable to suit specific roles and use cases.
- It is an easy-to-use SaaS infrastructure APM tool, which includes the New Relic Database (NRDB) and a real-time data store that enables schema-less, index-less searching of raw data.

### Ovum view

New Relic offers a comprehensive SaaS-based platform, covering the health of both applications and infrastructure. In the last year alone, it released more than 200 new features to this highly scalable APM environment.

This new product has been built from the ground up in response to the explosion of containers and their corresponding orchestration systems (Kubernetes, Mesos, etc.), the massive migration to the cloud (AWS, Azure, Google, IBM, and hybrid clouds), and the move to DevOps, microservices, and cultures of observability. Ovum believes that the end-to-end visibility it offers from a single unified platform provides significant advantages over point solutions.

New Relic is also exploring the use of a number of predictive analytics and machine-learning capabilities, including behavior pattern baselining, with its Project Seymour, which will use New Relic's real-time data stream to build pervasive predictive and prescriptive analytics capabilities into the platform.

## Recommendations for enterprises

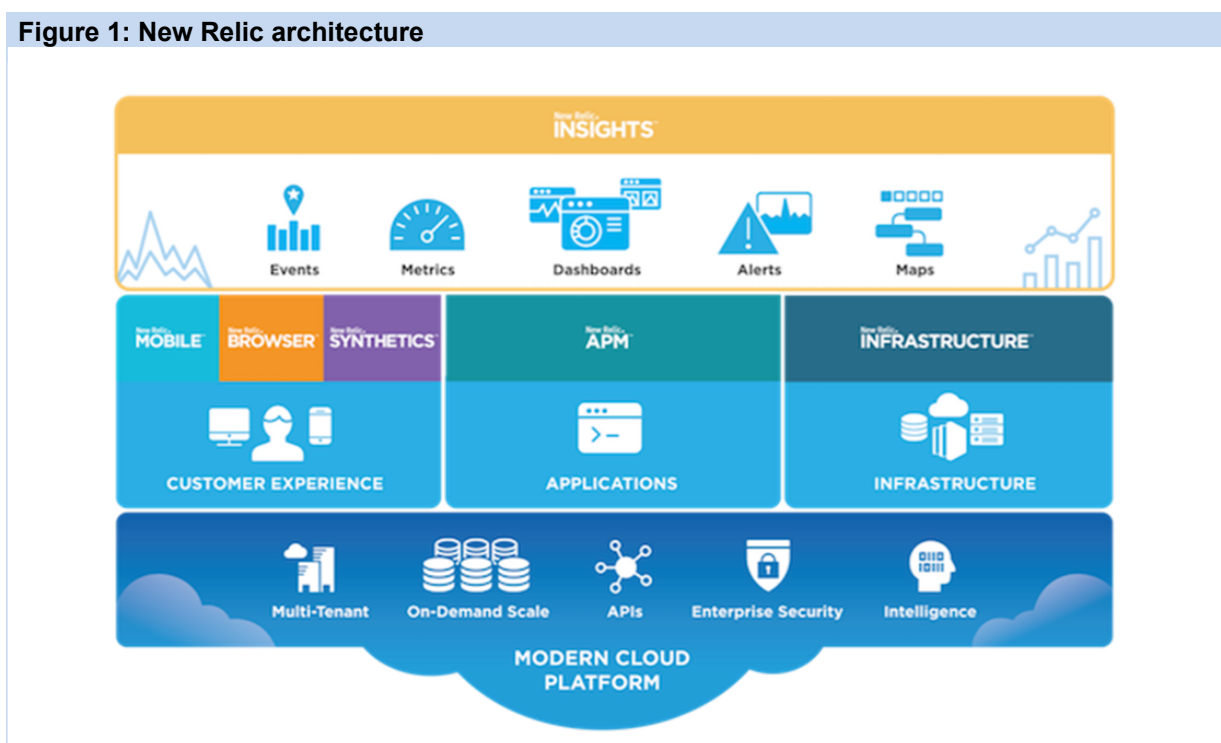
### Why put New Relic on your radar?

New Relic has been engineered to help those developing for the cloud; in particular, it handles APM across their whole stack, which has complex and highly dynamic infrastructures that scale rapidly to meet demand. New Relic is also appropriate for the wide range of technologies in use in DevOps environments. It offers a valuable tool for tracking performance as well as finding and fixing problems down to a single line of source code, or faults due to infrastructure issues. As such, it will appeal to both development and operations personnel.

## Highlights

### Main features of New Relic Digital Intelligence Platform

Figure 1: New Relic architecture



Source: New Relic

New Relic is a unified cloud-based SaaS platform that is designed to scale rapidly. Above this base layer, the company is expanding its APM footprint with new products. The top layer supports potentially hundreds of dashboards tuned to the needs of each organization.

More specific aspects of the architecture are described below against the main features.

- **New Relic APM.** It allows multitenant SaaS implementation with a seamless setup that takes mere minutes. It is designed to monitor app performance down to each line of code and how each component is connected, providing alerts across the whole stack. It is also highly secure, audited, and rigorously documented to SOC 2 standards. New Relic uses a Java agent that can be tailored to a client's specific needs with more comprehensive

instrumentation APIs. It also uses error analytics; an analysis tool for identifying and resolving errors will be available for .NET applications.

- **New Relic Infrastructure.** It provides a precise picture of dynamically changing systems with server monitoring. Real-time health metrics are correlated with recent configuration changes to resolve issues quickly, scale rapidly, and deploy intelligently. New Relic supports 20 of the most used AWS products out of the box, including serverless computing from AWS Lambda.
- **New Relic Browser.** It provides a front-end application performance monitoring service, with real-time visibility into the actual user experiences of a website.
- **New Relic Browser Source Map Support.** It gives developers more actionable visibility into their front-end JavaScript errors by showing exactly where in the original source the error occurred, even in code that is minified.
- **New Relic Mobile.** It enables mobile app performance monitoring, providing end-to-end monitoring of a mobile app – from the device through the network, back end, and infrastructure.
- **Synthetics enables availability, performance, and functionality monitoring.** Synthetics enables monitoring of availability, performance, and functionality of web applications and APIs via four different monitor types.
- **Insights and dashboards.** New Relic enables customers to examine all the events and metrics that are sent via its agents and synthetic monitors using a mixture of its proprietary query language, NRQL (New Relic Query Language), or using a visual point-and-click data explorer.
- **New Relic Alerts.** New Relic has re-architected alerting to provide a centralized UI and the ability to create alerts with full-stack visibility. It has introduced several new alerting capabilities such as Dynamic Baseline Alerts, NRQL Alerts, and dynamic targeting. Using Dynamic Baseline Alerts, customers can create dynamic alerts based on baselines/predictions created from historical data.
- **Predictive analytics.** It detects anomaly, memory leak, disk space, and deployment regression.
- **Prescriptive analytics and situational awareness.** It offers predefined insights into what are, for example, the busiest apps, busiest cities, and slowest web apps, as well as what is likely to be the main cause of an issue.

## Background

New Relic is a public company headquartered in San Francisco. Lew Cirne is the company's CEO and founder, and has led it since its inception in 2008. He previously founded Wily Technology and led the company from 1998 to 2006. A developer at heart, Lew started his career with engineering positions at Apple and Hummingbird Ltd. He holds an A.B. degree in Computer Science from Dartmouth College and has more than 20 patents in his name relating to performance management.

Jim Gochee, New Relic's chief product officer, was the chief architect of the Wily Technology division of CA, where he was the technical lead for Introscope, an industry-leading web application performance monitoring solution. Jim also holds an A.B. degree in Computer Science from Dartmouth College.

## Current position

For the fiscal year ending March 2017, New Relic's revenue was about \$270m, up 40% year on year. The company expects to grow by about 30% in the coming year. New Relic has 15,000 customers overall and a little over 1,700 that it considers enterprise.

Companies such as Airbnb and Spotify were early adopters, and overall the customer list is impressive with media companies such as Time Warner, retail companies such as Yesco and John Lewis in the UK, and tech companies such as LinkedIn, eBay, and IBM.

New Relic is a global organization with dedicated teams focused on North America, EMEA, Asia-Pacific, and Latin America. Its SaaS platform currently ingests more than 1.4 billion metric and event data points per minute for its paying customer base.

New Relic categorizes partners into the following three groups (in order of importance):

- cloud platforms – AWS, Microsoft Azure, Pivotal, and Google Cloud Platform.
- system integrators, consultants, managed service providers, and resellers – the most significant partners in this group are also aligned with AWS; examples include 2nd Watch, Accenture AWS Business Group, Booz Allen Hamilton, Bulletproof, Carahsoft, Claranet, Cloudreach, Datapipe, Dedalus, Digitas, KCOM, Nordcloud, Rackspace, SHI, and Slalom; embedded/OEM offerings are also available from Acquia, Magento, Rackspace, and WP Engine.
- technology ecosystem partners – they fall into the following two camps:
  - workflow partners – these are technologies that joint customers use to build and run software; these partners, including Slack, Atlassian, PagerDuty, and xMatters, typically integrate with New Relic's alerting platform to consume alerts and/or insert deployment notifications.
  - visibility partners – these are companies that either offer technologies that New Relic's customers wish to instrument or augment New Relic's capabilities via other data sources, such as Splunk and Sumo Logic.

### **New Relic's key technology partnerships**

New Relic has trusted integrations with most of the widely used IT operations, development, testing, and security tools.

#### *Integration with incident response tools*

It integrates with PagerDuty, VictorOps, xMatters, OpsGenie, and Blue Medora to enable customers to quickly respond to performance issues that it detects.

#### *Integration with logging tools*

New Relic has a strategic alliance and a new integration with Splunk to help enterprises improve customer experiences and drive revenues. It has also partnered with Sumo Logic, a machine data analytics service, in order to combine machine data analytics with its application and infrastructure performance data.

#### *Integration with configuration management tools*

It integrates with Ansible, Puppet, and Chef to deploy and maintain thousands of applications and a variety of infrastructure in an automated fashion.

### *Integration with collaboration and ticketing tools*

New Relic provides built-in support to deliver alerts notifications (from the entire stack – i.e., Browser, Mobile, Application, and Infrastructure) to commonly used collaboration and ticketing tools such as Slack, HipChat, Jira, and ServiceNow.

## Data sheet

### Key facts

<b>Product name</b>	New Relic Digital Intelligence Platform	<b>Product classification</b>	APM, infrastructure monitoring
<b>Version number</b>	1.0	<b>Release date</b>	Continual
<b>Industries covered</b>	All	<b>Geographies covered</b>	North America, EMEA, Asia-Pacific, Latin America
<b>Relevant company sizes</b>	All	<b>Licensing options</b>	100% SaaS
<b>URL</b>	<a href="https://newrelic.com/">https://newrelic.com/</a>	<b>Routes to market</b>	Native SDKs; multiple language and framework support infrastructures sold directly and indirectly
<b>Company headquarters</b>	San Francisco, California, US	<b>Number of employees</b>	1,200

Source: Ovum

## Appendix

### On the Radar

On the Radar is a series of research notes about vendors bringing innovative ideas, products, or business models to their markets. Although On the Radar vendors may not be ready for prime time, they bear watching for their potential impact on markets and could be suitable for certain enterprise and public sector IT organizations.

### Authors

Michael Azoff, Principal Analyst, Infrastructure Solutions

[michael.azoff@ovum.com](mailto:michael.azoff@ovum.com)

Martin Gandar, Associate Senior Analyst

[martin.gandar@ovum.com](mailto:martin.gandar@ovum.com)

## Ovum Consulting

We hope that this analysis will help you make informed and imaginative business decisions. If you have further requirements, Ovum's consulting team may be able to help you. For more information about Ovum's consulting capabilities, please contact us directly at [consulting@ovum.com](mailto:consulting@ovum.com).

## Copyright notice and disclaimer

The contents of this product are protected by international copyright laws, database rights and other intellectual property rights. The owner of these rights is Informa Telecoms and Media Limited, our affiliates or other third party licensors. All product and company names and logos contained within or appearing on this product are the trademarks, service marks or trading names of their respective owners, including Informa Telecoms and Media Limited. This product may not be copied, reproduced, distributed or transmitted in any form or by any means without the prior permission of Informa Telecoms and Media Limited.

Whilst reasonable efforts have been made to ensure that the information and content of this product was correct as at the date of first publication, neither Informa Telecoms and Media Limited nor any person engaged or employed by Informa Telecoms and Media Limited accepts any liability for any errors, omissions or other inaccuracies. Readers should independently verify any facts and figures as no liability can be accepted in this regard – readers assume full responsibility and risk accordingly for their use of such information and content.

Any views and/or opinions expressed in this product by individual authors or contributors are their personal views and/or opinions and do not necessarily reflect the views and/or opinions of Informa Telecoms and Media Limited.

## **CONTACT US**

[www.ovum.com](http://www.ovum.com)

[analystsupport@ovum.com](mailto:analystsupport@ovum.com)

## **INTERNATIONAL OFFICES**

Beijing

Dubai

Hong Kong

Hyderabad

Johannesburg

London

Melbourne

New York

San Francisco

Sao Paulo

Tokyo

