

Product: Nexmo's SMS & Voice APIs, Number Insight

Use Case: Voice-Based Critical Alerts, Text-to-Speech, Private SMS, & Phone Number Validation

Industry: IT Support



OVERVIEW:

PagerDuty is a leading digital operations management platform for businesses that enables DevOps, IT operations, support, security, and business leaders to take timely action when incident resolution is critically needed. PagerDuty helps teams prevent and resolve business-impacting IT issues and deliver exceptional digital experiences.

CHALLENGE:

When IT incidents occur, it is imperative that PagerDuty delivers quick and accurate voice and SMS notifications and alerts to those people who are tasked to help resolve issues. PagerDuty needed to ensure that the right people were notified at the right time, and that those people had access to the necessary data and tools to resolve any issue quickly.

SOLUTION:

Nexmo Voice and SMS APIs, Number Insight

RESULTS:

PagerDuty is now able to standardize on Nexmo's interface and deliver timely, high-quality service to the many regions where they need to deliver.

IMPACT:

With Nexmo's APIs, PagerDuty has the confidence that their customers' business-critical communications will be delivered quickly and easily.

Nexmo Enables PagerDuty to Provide Voice & SMS Notifications for Business-Critical Incident Resolution

The speed with which engineers are able to successfully resolve incidents that arise in technology development and infrastructure can easily make or break a company. Unexpected downtime can amount to thousands or even millions of dollars in lost revenue, not to mention damage to the organization's brand equity. That's why PagerDuty's digital operations management platform has rapidly grown to become one of the top "must have" SaaS applications for IT executives.

PagerDuty notifies information technology (IT) teams when issues occur regarding their mission-critical applications. The company's platform integrates with a huge variety of monitoring tools that provide organizations with a comprehensive view of their entire digital stack health, allowing developers and administrators to identify and resolve issues proactively, before they have a chance to bring business to a grinding halt.

PagerDuty's platform streamlines the incident resolution process to ensure the right people are notified at the right time, and that those people have access to the necessary data and tools to resolve any issue quickly. The SaaS offers both a tool that users can access via web, mobile devices, email, or phone, and a platform that integrates the organization's existing developer tools into an incident response workflow.

Finding Nexmo: When Notification Delivery Is Crucial

Jeremy Bourque is the product manager on PagerDuty's notification delivery team. According to Bourque, "The original idea behind PagerDuty was fairly straightforward. There were a lot of DevOps teams developing code, developing services delivered over the web, and they were also on call and responsible for those services if something went wrong. They would need to be available to troubleshoot and fix issues.

"PagerDuty was originally developed to facilitate that process and create a central place where all of the alerts from different monitoring tools could be routed, then to notify the right people according to the configured on-call schedules and escalation policies. We've since evolved and expanded into modern incident response, more sophisticated event intelligence, and more. Now we're screening noise, de-duping and aggregating different signals, providing analytics and visibility, as well as supporting team coordination and multi-team responses."

“When there’s a critical problem at 2:00 am, our customers depend on us to wake them up. The best way to do that is with a phone call. That’s why we use Nexmo’s Voice API to make sure we can meet that essential need for our customers when it matters to them the most.”

- Jeremy Bourque
Product Manager, Notification
Delivery | PagerDuty

One of the most critical components to PagerDuty’s business has—from the beginning—been notification delivery. When a signal comes in that is important and potentially business impacting, people need to be informed immediately. “The whole idea behind PagerDuty came from our founders being on-call and literally carrying around a pager,” said Bourque. “When you came on call, you physically took that pager from that last person. It’s a really old fashioned model that certainly doesn’t make sense anymore. But that idea of something like a virtual pager is still part of the core of PagerDuty today.”

Today, since everyone carries a mobile phone with them, the mobile device has become the primary way of “paging” people on call. A PagerDuty user can configure an app to indicate how they want to be notified, and when a signal comes in, they can be contacted on the device that they already have. A user has the option to get a push notification on their mobile device, an email, or an SMS and/or voice notification.

Nexmo’s Voice and SMS APIs power this core functionality of the PagerDuty platform. Since most people prefer to set up their notification rules so that less intrusive notifications are tried first, SMS followed by Voice is a common configuration. However, some do rely on Voice as their primary notification. According to Bourque, “When there’s a critical problem at 2:00 am, our customers depend on us to wake them up. The best way to do that is with a phone call. That’s why we use Nexmo’s Voice API to make sure we can meet that essential need for our customers when it matters to them the most.”

Since PagerDuty customers span the globe, they expect the company’s software to work globally. “From a customer’s perspective, it should be very simple and seamless,” said Bourque. “They should be able to indicate on which number they want to be called or sent an SMS, and it should work easily and transparently for them. It’s not easily accomplished, but that is what Nexmo does for us quite well.”

Nexmo’s Number Insight to Reduce Incidents of Fraud

PagerDuty has also recently started to use Nexmo’s Number Insight API, allowing them to implement additional verification for their platform. When PagerDuty faced growing costs related to fraud, Number Insight was a tremendous help. “We’ve always been proud to offer a free trial of our service, but that exposes us to an increased risk of fraud. We had some cases that had involved the use of premium phone numbers,” said Bourque. “So we looked for a way to prevent that problem.

“Number Insight allows PagerDuty to verify phone numbers and receive information about the numbers, including whether or not they are premium. By identifying the premium numbers to prevent people from using them inappropriately, the company is reducing the incidents of fraud. According to Bourque, “In North America all of the premium numbers follow a fixed pattern such as 1-900 or 1-9-something numbers, so you can weed those numbers out fairly easily. But globally, it becomes much harder. Figuring out whether or not any given international phone number is a premium number was a challenging problem for us, but Nexmo made it easy.” As Bourque summarized, “Nexmo really stood out as a company that had a robust feature set to its platform, good availability, good global reach, and good pricing. It’s a top-tier player that we looked at and said, ‘this is a company we want to do more business with because we can standardize on this interface and deliver to all the regions that we need to deliver to.’”

