

CASE STUDY

CYRUSONE

**CLIENT PROFILE**Site: www.cyrusone.com

Industry: Finance

Headquarters: Dallas, TX

Employees: 380

Company Background

As a leading data center provider to just under 1,000 customers globally—including 175 of the Fortune 1000—CyrusOne is known for its excellent customer service, enduring customer relationships and high customer satisfaction levels, with 30 data centers across the United States, Europe and Asia.

Ensuring that CyrusOne's internal users enjoy the same level of satisfaction with their application performance as its external users was a chief priority for Steve Aichelmann, senior director of IT infrastructure, when he joined the company more than two years ago. At the time, there was a team of only three tasked with managing the expectations of 500 users, plus contractors and visitors accessing public WiFi. With limited visibility into a growing portfolio of cloud-based applications that included Office 365 and Salesforce.com, Aichelmann had some challenges as well as opportunities in meeting the user satisfaction goal.

"We could watch the carriers and see what was going on there, but we had no efficient way to pinpoint problems down to the application level," he said.

When a user called with a problem, it wasn't easy to identify the root cause, especially when tests and metrics indicated that the network itself appeared to be performing fine. Aichelmann's team had to log into multiple tools at multiple sites, pull the data together manually, and perform analysis to trace the root cause and begin troubleshooting.

These visibility problems were pushed front and center when the company switched Voice over Internet Protocol (VoIP) providers in 2014 and users started to complain about poor call quality. With metrics showing that network performance appeared fine, Aichelmann knew his team needed another tool to drill down to the application level, identify problems and provide quick resolutions. With the right combination of team and technology, he could increase user satisfaction, refocus his team on more strategic priorities, and leverage data to be an innovation partner to the business.

We can see what's going on with more than one application, and the speed at which we can react is dramatically improved [...] We have the tools available and can pinpoint where the problem is, rather than having a broad paintbrush approach.

STEVE AICHELMANN,
SENIOR DIRECTOR OF
IT INFRASTRUCTURE

Better Data, Faster Answers, Happier End Users

After looking at other software, the team chose AppNeta by Broadcom Software for deployment for its 31 global locations. With AppNeta, CyrusOne has a real-time view of cloud-based application performance exactly where each user is located, taking into account variables like wide-area network (WAN) links, content delivery networks and load balancers. Instead of tracking and defining performance based on server stats like central processing units (CPUs) and memory usage, AppNeta gives a snapshot of user satisfaction, providing the ability to drill into application-specific data to remedy issues. Customizable application performance index scores, milestones and HTTP throughput with network and application performance data collectively provide great insight into application performance.

CyrusOne can combine usage from multiple monitors to identify trends across different locations. The team can also compare multiple sites at the same time with the same type of test, saving time identifying the root of the problem and troubleshooting it.

Aichelmann recalled a recent issue in which some of his Office 365 users were experiencing performance problems while others were not. He used AppNeta to research software as a service (SaaS) provider connections to determine what endpoints were sending data. He found that different servers hosted the applications, with the source of the problem affecting the dissatisfied users in only one of those instances. Without AppNeta, they couldn't have contacted the provider with such specific information to ask for a reboot and move to the other server. "We could not only see it, but give them a snapshot of the slower server," Aichelmann said.

"We can see what's going on with more than one application, and the speed at which we can react is dramatically improved," Aichelmann added. "We have the tools available and can pinpoint where the problem is, rather than having a broad paintbrush approach."

Aichelmann and his team applied AppNeta to sort through the problems with the VoIP system as well. By simulating test calls across the network, they could more reliably pinpoint root causes, because they were testing the applications at the same endpoints users were.

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scratching the surface
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STEVE AICHELMANN

Proactive Application Troubleshooting on the Horizon

Having clear, consumable data on what's causing application performance problems now positions Aichelmann's team to mine data for trends and efficiency opportunities. His goal is to find problems before they ever touch users, leveraging AppNeta to perform proactive application monitoring. For instance, AppNeta can help identify applications for which users have become accustomed to slow response times, and Aichelmann's team can look for ways to improve performance. They've also pinpointed an application slowdown that happens only in the evenings, so users haven't noticed it. But with AppNeta, Aichelmann's team will be able to uncover the root cause and get ahead of a potential issue that could appear during business hours.

"It's that kind of analytics that previously we didn't have available to us," he said. Aichelmann is also working on ways to show users and executives what they need to know about the overall health of the network, using automated data in real time to inform users through the company's business intelligence tool.

Right now, Aichelmann's team has seen multiple benefits even though AppNeta is only connected to a single access switch on an endpoint—prioritized according to those applications that seem most problematic for users. But the team has plans to connect that access switch to the core switch and monitor multiple access switches from one location to see what else they can optimize before users notice issues.

"We're really just scratching the surface," Aichelmann said. "It's so powerful."

About CyrusOne

CyrusOne specializes in highly reliable enterprise-class, carrier-neutral data center properties. The company provides mission-critical data center facilities that protect and ensure the continued operation of IT infrastructure for hundreds of enterprise customers, including notable Fortune 1000 and cloud computing brands. CyrusOne's data center offerings provide the flexibility, reliability, and security that enterprise and cloud customers require, and are delivered through a tailored, customer-service-focused platform designed to foster long-term relationships. CyrusOne's National IX platform provides robust connectivity options to drive revenue, reduce expenses, and improve service quality for enterprise, content and telecommunications companies. CyrusOne is committed to full transparency in communication, management, and service delivery throughout its global footprint of world-class data centers.

About Us

Broadcom Software is one of the world's leading enterprise software companies, modernizing, optimizing, and protecting the world's most complex hybrid environments. With its engineering-centered culture, Broadcom Software is building a comprehensive portfolio of industry-leading infrastructure and security software, including AIOps, Cybersecurity, Value Stream Management, DevOps, Mainframe, and Payment Security. Our software portfolio enables innovation, agility, and security for the largest global companies in the world.

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