IOTUM CALLS ON NiTO

MONITORING SOLUTION TO ENSURE CLEAN, QUALITY COMMUNICATIONS SERVICE

Peak Users | 8,000-12,000+ simultaneous users

Devices Monitored | 185 (Linux and Windows servers and telco switches)

ABOUT IOTUM

With offices in Toronto and Los Angeles, iotum is an international leader in teleconferencing and group communications. Founded in 2004 primarily as a Voice over IP (VoIP) and telecom switch company, the company has evolved to provide several cutting-edge collaboration services to millions of users worldwide. The company has been recognized for its rapid growth by the PROFIT 500, Deloitte Fast50 and INC5000.

Its flagship product, **www.FreeConference.com** provides more than a billion minutes of digital conference calls a year, while Callbridge, its Communications Platform as a Service (CPaaS) offers private and secure enterprise-grade audio, video and web conferencing.

In 2016 the company acquired the community-based podcasting platform TalkShoe, which it later relaunched with the additional of several new features, including video and YouTube integration. The company has a distributed infrastructure including approximately 100 servers spread across six global data centres, a Point of Presence (PoP) in L.A. and three in the American Midwest, making it a challenging environment to monitor effectively.

CHALLENGE

iotum required a solution that could scale alongside the company's services and support a vastly distributed physical and virtual infrastructure.

The open source monitoring software iotum originally used could not scale with the company's rapid growth and innovation, so in 2016 the company sought out a more full-featured solution. The company needed a solution that could monitor both its physical and expanding cloud infrastructure while keeping up with added services and acquisitions, all while satisfying the rigorous demands of communications and collaboration services.

"Monitoring has become absolutely crucial to our business," said Noam Tomczak, Chief Operating Officer of iotum. *"We've had incredible growth in terms of the number of platforms, services and different places our infrastructure lives. We literally have some servers housed in sheds in cornfields connected by fibre to our service network. To ensure we are resilient we must know what is happening at every point on it at all times."*

SOLUTION

After a demonstration of NiTO, iotum completed a free trial and became one of the monitoring platform's earliest customers. Originally using NiTO to perform traceroutes to find optimum network paths and reduce latency, iotum has replaced its other monitoring tools with NiTO, giving the company a single infrastructure monitoring dashboard that meets all its complex needs.

NiTO provides iotum with near real-time visualizations that allow its IT team to easily monitor the health of its servers, end points and network devices, as well as latency between its media infrastructure and data centres and between its infrastructure and applications. NiTO monitors Windows and Linux OSs with a four-second resolution. Armed with crucial data and actionable alerts in mere seconds, the iotum team can quickly troubleshoot and make critical decisions rapidly to keep services running like clockwork.

Ready to deploy out-of-the-box, NiTO helps iotum easily deploy new IT resources and services and have them monitored almost instantly. The very light-weight solution requires minimum set-up and system resources, providing iotum with a one-stop dashboard to monitor its distributed offices, PoPs, physical and virtual servers and devices on-premise and in the public cloud. Importantly, the connection between NiTO and the iotum infrastructure is automatically secured and encrypted, removing the need for an additional deployment step for the iotum team to worry about.

NiTO meets the needs of supporting live meetings

"The live meeting experience is about as unforgiving as it gets. Making sure the network is optimized and operational is vital to us," Tomczak said. *"If anything goes wrong users get angry and frustrated in an instant. We're notified right away if there should be any network or performance issues, and NiTO gives us the visibility into our network needed to ensure we are providing clean, clear voice, video and feature-rich collaboration meetings for our users."*

BENEFITS

NiTO monitoring helped iotum expand from mainly voice to a primarily video service that offers full-featured meetings with confidence they had visibility into their entire network, devices and processes.

As new needs arose, the company communicated them with the NiTO development team who were very receptive to feedback. "***That's something we look for in a vendor, being able to grow and mature alongside us,***" Tomczak said.

As iotum added distributed conference capabilities, and continues to embrace cloud-based service, having a monitoring solution able to help them find the closest links between data centres to reduce latency has become a greater necessity.

A Software as a Service (SaaS)-based solution, NiTO automatically delivers all upgrades and updates without the need for IT involvement.

AGILE AND RAPID RESPONSE

As well as providing near real-time statistics about the quality of connections and the health of servers, NiTO is integrated into the company's applications and call centre to dramatically reduce mean time to recovery (MTTR). "***If a server happens to go down, we're notified immediately and can respond just as quickly, which is particularly useful given our business,***" Tomczak said.

> **"NiTO works so well, you don't really have to dig into the solution and configure much. The easy-to-read visualizations and dashboard tell the whole story of what's going on in the network, processor use and device health."**

ABLE TO SCALE ON A DIME

"We especially like that we can register a new virtual resource to NiTO programmatically as we create it. This is extremely important today, since we need to spin up new IT resources with more speed and agility than ever," Tomczak added.

Use of iotum services exploded in 2020 with the global spread of the coronavirus disease (COVID-19). During the pandemic, use of iotum services quintupled from traditional peaks of approximately 2,000 simultaneous users to 8,000 to 12,000 simultaneous users.

"All this happened over only about two weeks, and our ability through NiTO to understand what that load was doing to our system was essential to helping us scale up."

PREPARED FOR THE FUTURE

With the diagnostic data provided by NiTO, iotum can become more predictive to the needs of their expanding infrastructure.

"NiTO doesn't just inform us of the health of our network, but we also have it set to recognize thresholds for processor use, so we know when we have to add new resources to our data centres. So, it alerts us quickly to failures but most importantly alerts us to opportunities to prevent them from ever happening."

The company expects it will need to add more servers to be monitored by NiTO soon but has also been tentatively looking at the ability to add custom metrics to the solutions reporting. *"We have a lot of interest in understanding the number of channels in use dedicated to voice or video, since we use separate channels for each. NiTO can help us do that."*