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Indiana Office of Technology Delivers Residents Quality Digital Experiences With ThousandEyes

Company Background

The Indiana Office of Technology (IOT) is the State of Indiana's centralized IT (Information Technology) agency that supports the mission and operations of around 90 partner agencies that serve almost seven million residents.

Industry: Public Sector

Headquarters: Indianapolis, IN

Use Cases: Customer Digital Experience, Application Experience, Cloud Monitoring, SaaS Monitoring

Serving the State

Back in 2005, the State of Indiana initiated a project to merge duplicative systems and technologies, leading to the creation of a central agency known as the Indiana Office of Technology (IOT). Its ultimate objective is to provide next-level digital government services that will satisfy at least 95 percent of the state's seven million residents, also known as "Hoosiers."

As part of its role, IOT supports almost 500 business-critical applications for 90 partner agencies, which offer necessary services like licensing and workforce development. "What makes us unique is our vast knowledge of the many different program areas and those technologies needed in each area," says Brad Welsh, Lead Program Manager for Application Performance Management at IOT.

To ensure an elevated level of customer satisfaction for all these apps, constant monitoring and measuring are necessary.

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Lead Program Manager for Application Performance
IOT

A 24-Hour Operation

The paramount consideration for IOT is the value and quality of support they offer to partner agencies. After all, their end goal is the same: to deliver the best possible customer experience to constituents. And as the state's designated technology provider and support service, the agency must fulfill its Service Level Agreement (SLA) commitments.

"We are shifting from a mindset of providing uptime on servers and technology to a mindset of round-the-clock uptime," said Welsh. "We're not eight-to-five, five days a week anymore, so these applications must be available."

Residents of Indiana rely on state apps for essential services such as renewing driver's licenses, paying taxes, and obtaining professional licenses. When they undertake these activities, they expect a seamless experience from their state, whether they use online apps or perform them in person.

Fire Drills When Apps Go Down

Before, whenever there was a problem with a service or an app outage, IOT had to coordinate with various teams to promptly find the issue and prevent it from interfering with ongoing state operations.

"It was usually a fire drill," said Welsh. "We had to engage the network, app, and data teams—there were a lot of people on an outage call at a time."

For greater scalability and improved end-user experiences, the agency began adopting its Cloud Smart strategy, which involves hosting more business-critical applications on cloud platforms. It also meant that they relied more on services outside their direct control, such as the Internet and third-party providers.

Their systems also grew to include many more SaaS (Software as a Service) apps than before, such as Microsoft 365 and SuccessFactors (a workforce training platform hosted externally). Moreover, as the state's SSO (Single Sign-On) service, Access Indiana, took off, it created 1.4 million reasons—thanks to 1.4 million registered users—for greater oversight.

"We have products for Single Sign-On that we have to monitor and keep eyes on that are very important for authentication," said Welsh.

To keep their business-critical applications running smoothly, IOT needs to collaborate with vendors such as ISPs (Internet service providers) or telecoms. However, identifying the source of the problem, and whether it is an external or an internal issue, has always been a challenge. Fortunately, ThousandEyes had the solution to this problem.

A Proactive Stance

IOT recently began its Full-Stack Observability (FSO) journey with Cisco to address the agency's blind spots when resolving app, network, data, or other issues outside its direct control, including ISP-related or user-related ones.

As part of its observability journey, IOT has enhanced its network visibility with the help of ThousandEyes. The agency uses the ThousandEyes Internet and Cloud Intelligence platform to easily find the root cause of application issues, whether they originate from an external vendor or an internal source. This proactive approach has enabled IOT to address problems quickly and efficiently, ensuring a seamless experience for its users.

ThousandEyes has also made it easy for IOT to establish monitoring and testing systems for their business-critical applications. "Previously, we just had no visibility at all," said Welsh. "But now, with ThousandEyes and Cisco's help, we can monitor our vendor cloud-hosted platforms." To achieve this level of visibility, Welsh's team deployed a combination of Cloud Agents, Enterprise Agents, and 40,000 Endpoint Agents on managed devices.

"ThousandEyes gives us the perspective and view from outside our four walls," said Welsh. "We have never had that type of view before, and it's all very intuitive and easy to use."

With ThousandEyes, IOT is also carrying out synthetic testing that mimics user actions like logging in and scheduling appointments within an app, which helps ensure that state government operations run smoothly and are easy to use for everyone.

"If there are issues from the user's perspective, ThousandEyes will quickly alert us, providing us with that proactive stance we are looking to achieve," said Welsh.

Following a recent patch weekend, some of the agency's crucial infrastructure was affected. Thanks to ThousandEyes, IOT could pinpoint the problem and direct it to the right team for prompt resolution.

Value to the Citizenry

Already monitoring approximately 120 business-critical applications through ThousandEyes, the agency has improved visibility, saved time and expense, and minimized technical inconvenience for citizens who use State of Indiana services. The agency plans to include all 500 of its applications in the monitoring system within the next 18 months.

"By adding these business-critical apps and maturing the program, we will be able to support our partner agencies better and, in turn, our constituents that consume the business services we offer them," said Welsh.

To convey this value, the agency has created a report that lists the top 10 healthiest and unhealthiest applications it manages and shares it with the Governor's Office leadership. IOT understands that supplying health metrics for critical business applications is valuable information for their stakeholders.

"The chiefs have to report and show value in the technology that we've purchased for the state's citizens," he concludes. "The goal is to show that we have eyes on these things, and this solution provides that for us within minutes."

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