



CASE STUDY

Optimizing the In-Store Retail Experience with Application & Network Monitoring

The Challenge

A leading fashion retailer with over \$2.8B in revenue rolled out new wireless guest networks in each of their 260 retail locations about three years ago. Upon roll-out, the corporate network team, who supports the retail locations as well, realized they had no visibility into how the wireless guest networks were performing. A combination of poor application performance and a lack of guest network wireless visibility led to an increasing amount of user complaints and service tickets from retail locations.

On top of the guest network visibility challenges, retail store employees who rely heavily on a number of homegrown and third-party applications were experiencing periodic slowdowns or downtime. For IT, there was no clear picture of where the issue was rooted. When those issues occurred, the only option was for the retail employee to submit a ticket to the helpdesk. In a fast-paced retail environment, that caused lost productivity and resulted in lost revenue. It became clear that the corporate network team needed a solution for monitoring user experience at the retail locations as well as the performance of those business-critical web applications and networks.

Zero visibility into their new guest networks

“We had a particular problem with monitoring guest networks in terms of whether they were up or down,” explains their network services manager, “because by design they’re not on our network and we didn’t have a tool to allow us to see what was going on.” The service tickets submitted by retail employees through store management sometimes wouldn’t be received until days after the issues occurred.

No application performance for their homegrown web and SaaS apps

Each of the retail store employees access a number of business-critical applications on a daily basis, most of which are homegrown web apps. These homegrown apps consist of apps that retail employees use regularly for point of sale, for back office timekeeping or to calculate in-store sales for the day, and were mainly developed with .NET and live on IIS web servers. In addition to these homegrown apps, employees also use business-critical SaaS applications such as Office 365. When productivity issues within these apps arise, such as an employee not being able to clock out for the day, a helpdesk ticket would be submitted. When these service tickets made their way to the application team, they would have no insight into why these issues were occurring or if the issues were with the applications or the network infrastructure.

App or network? Let the finger-pointing begin!

With no solution or tool for proactively and historically monitoring the retail SaaS and homegrown web applications or the guest networks, it was difficult to diagnose whether the issue lay within the application or the network. When a helpdesk ticket was submitted, it usually went to the network team, who would try to triage the request and determine the root cause. It was often difficult for the network team to prove definitively that the issue wasn't on the network. The issue, if not diagnosed, would be passed to one of the application teams. This lack of visibility into their networks and applications caused a lot of internal finger-pointing between these teams. Without historic performance data, it was nearly impossible to pinpoint the moment when a problem started.

The Solution

The retailer was in need of a monitoring solution for both retail guest networks and business-critical applications used by in-store employees. It was crucial that this solution would allow them to act quickly when a retail

store experienced slowness or downtime associated with the in-store guest wireless or a poorly performing web app through proactive and historic monitoring and alerting. That's where AppNeta came in.

The retailer's network team implemented AppNeta to proactively monitor each of the guest networks, giving them hop-by-hop visibility across the WAN and into the last mile at the retail location to the user, allowing them to uncover issues and latency while proactively alerting the team before end users are even affected. AppNeta synthetics allowed the teams to monitor the experience of their top in-store business-critical applications both homegrown and SaaS, from the end user's perspective.

"With AppNeta, we can now log on to a specific guest network the same way a customer in the store would and experience it from their perspective, which we haven't been able to do with any other tool out there," said the network services manager. Further, using AppNeta allowed the network team to understand which applications were using the most bandwidth, and take steps to resolve them.

The Results

The network team is now able to pinpoint whether latency or outages were caused by the network or application within minutes. If the issues are on the application side, AppNeta is able to help diagnose which application is experiencing problems, and inform the appropriate team. Finger pointing has become a thing of the past for this retailer.

The network services manager also found immediate value by cutting the amount of time and resources

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he spent troubleshooting, which has reduced the mean time to resolution. The network services team now has the AppNeta dashboard on a large screen in their NOC. If a network path turns red, the team knows there is a problem with the network, and can quickly fix it before it affects their end users. They also customized proactive alerts based on network and app SLAs to inform the team when performance begins to impact applications and user experience. They also email reports with information for application teams when there is a specific issue with one of their homegrown applications.

Before implementing AppNeta, the retailer's IT team often thought that user experience issues or application slowness at retail stores was due to the network. "The stigma is that we like to say 'It's not a network problem,' which in the past was our best guess," the network services manager said. "Now we say 'it's not a network problem and here is the report that shows why' and have full confidence. Sometimes it is a network issue. And when it is we know that it is from a bad hop, or that we're losing packets. We can see the weak link in the chain, and get it fixed."

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AppNeta gives the network team the concrete data they need to answer the age-old question "is it the app or the network?" and save time troubleshooting, allowing them to become more strategic and valuable to the business. And when it is the application, the specific application teams can use AppNeta data constructively to find and focus on the precise issues, freeing up time and resources for the network team to focus on more strategic initiatives.

"With AppNeta we immediately saw that this tool was not only going to allow us to monitor the guest network," the network services manager said, "but we're going to be able to do everything we have ever wanted to from a visibility and troubleshooting standpoint."

ABOUT APPNETA

AppNeta is the leader in proactive end-user performance monitoring solutions built for the distributed digital enterprise. With AppNeta, IT and Network Ops teams can assure continual and exceptional delivery of business-critical applications. AppNeta's SaaS-based solutions give IT teams essential application and network performance data, allowing them to continuously monitor user experience across any application, network, data center or cloud. For more information, visit www.appneta.com.