

Topgolf® Scales While Improving Guest Experience Using New Relic

When you visit a **Topgolf** venue, you experience a whole new way of playing golf, one that blends technology and entertainment so that both non-golfers and golfers of any age can have fun and share their experience. Your group rents a bay where you score points by hitting balls (with microchip technology) into targets, while enjoying great food and drinks.

Founded in the United Kingdom in 2000, Topgolf now operates more than 41 venues around the world, entertaining more than 13 million guests annually. The global leader in sports entertainment, Topgolf also offers original content shows, next-gen simulator lounges through Topgolf Swing Suite, a global Topgolf Tour competition, pop-up social experiences like Topgolf Crush, Toptracer technology as seen on TV, and the world's largest digital golf audience.

Unlike playing on an actual golf course, technology drives the Topgolf experience, from balls that track each shot's accuracy and distance to the same FullSwing golf simulators used by professionals. If the technology isn't performing at par or better, the guest experience can suffer.

"A significant portion of our revenue is based on game play, so if that application goes down, then that's a significant impact to our business," says Kenny Sullivan, director of applications at Topgolf. That's why the technology team at Topgolf turned to New Relic for real-time insights into software performance and reliability.

Integrating technology into every aspect of the game

From its inception, Topgolf has understood that innovative technology is the centerpiece of the guest experience as well as the foundation of its business model. The game system, a web-based PHP application running on-premise at venues, currently offers nine different games that players can choose from. Also located on-premise are services running in Docker containers that support venue operations such as reservations.

The member website, which runs on Amazon Web Services (AWS), lets members access their game history, manage reservations, check out upcoming events, and more. A mobile application offers much of the same functionality.



INDUSTRY

Sports Entertainment



LOCATION

Dallas, Texas

ASSOCIATES

16,000+

USE CASE

Improve performance and reliability for better guest and member experiences

PRODUCTS USED

New Relic APM, New Relic Browser, New Relic Infrastructure, New Relic Plugins

WHY NEW RELIC

Delivers in-depth insight into application performance and guest experience across on-premise and cloud infrastructure

HIGHLIGHTS

- Improved troubleshooting efficiency by 30%
- Reduced volume of trouble tickets by 15% despite adding nine new venues
- Accelerated software release cycle by 2x and cut response times in half



Keeping software performance from impeding gameplay

When Topgolf opened its first venues, maintaining reliability and performance of the software was a manual effort. But when the company quickly opened 20 new venues within a short period of time, manually monitoring and managing the performance of the critical software running at each venue became impossible.

“The technology touches every aspect of the guest experience at Topgolf,” says Sullivan. “We have to make sure that not only is the software up and running in each venue, but that it’s not slow and impeding gameplay. Software performance means the difference between a really pleasant experience for our guests or a negative one.”

For Devin Young, manager of tech operations at Topgolf, the core problem was the lack of visibility the DevOps teams at headquarters had into the software running at each venue.

“Because we didn’t have a way to monitor the software, we had no insight into the cause of problems at a particular venue,” Young says. Should those problems cause an outage, gameplay stops, which frustrates guests and venue staff alike, and can ultimately impact revenue.



The technology is important to us because it’s our product—it’s who we are as a company. Tools like New Relic help us make our software best-in-class and then keep it that way.

Kenny Sullivan
Director of Applications, Topgolf



Gaining real-time visibility into the guest experience

That’s why Topgolf chose New Relic, a SaaS solution it knew it could get up and running immediately. With the New Relic platform, Topgolf now has end-to-end visibility across the guest experience, application performance, and its on-premise and cloud infrastructure. While performance monitoring helps Topgolf’s technology group find and fix problems before they affect guests or venue staff, real-time and historical trend analytics also guide the team in how to proactively improve performance.

New Relic also creates an efficient feedback loop for Topgolf’s DevOps teams. “When we deploy to production, we mark the deployment in New Relic so that if something drastically changes, it’s very easy to tell what caused it,” says Young.

Having this visibility from the beginning of development all the way through to production not only helps improve ownership of the applications from a developer perspective, but also helps accelerate troubleshooting. “Thanks to this end-to-end user view, we’ve been able to increase our efficiency by about 30% when it comes to troubleshooting issues that we have with the venue,” say Young.



Using New Relic Plugins to monitor its RFID readers, Topgolf determined the root cause of a problem plaguing certain venues: high numbers of missed ball reads. “We wrote a custom plugin to see how many ball reads were coming in from our RFID readers,” says Sullivan. “With the plugin, we could instantly see that the venues that were having difficulties were those with very high volumes of ball reads. It was immediately obvious that those locations were victims of their own success and needed to clean out the field far more frequently.” Armed with that information, the Topgolf team can now focus on minimizing missed ball reads, which translates into a better experience for guests.

Dramatically improving performance reduces tickets and distress calls

Topgolf’s proactive efforts to improve application performance are showing big benefits. “We’ve been able to cut our response times in half, and increase our release cycle by almost twofold,” says Young. “New Relic is helping us prove our success to the business by giving full transparency into everything that we do as a technology team.”

With performance and reliability continuing to trend upward, the company can continue its global expansion without worrying about the guest experience with the software.

“Proactively focusing on performance optimization helped us reduce the volume of trouble tickets by 15% in the past 12 months, despite adding nine new venues during the same time frame,” says Sullivan, adding that venue outages are almost non-existent now.

And a stable and reliable game system means that Topgolf has more time for innovation and delivering even more value to customers. “Being able to innovate quickly and deliver solutions that make the game fresh and exciting for our guests is very important,” says Sullivan. “Now that we have valuable performance data that allows us to be more strategic, we can move quickly with confidence.”

Keeping the technology at the top of the leaderboard

For the technology group at Topgolf, sustaining the company’s success is all about extending and enhancing the technology and introducing innovations that keep guests and members coming back.

“The technology is so important to us because it’s our product, it’s who we are as a company,” says Sullivan. “Tools like New Relic help us make our software best-in-class and then keep it that way.”

