

Sneaker bots disrupted the launches of hot new product launches from PUMA North America, disappointing customers and taking the site down for hours at a time until help from F5 Distributed Cloud Bot Defense brought victory over the attackers and a better experience for PUMA's loyal fans.



Business Challenge

Both style and performance—it's a rare combination. It took both for NBA star LaMelo "Melo" Ball, known for flashy assists as well as impressive scoring for the Charlotte Hornets basketball team, to earn the 2021 Rookie of the Year (ROTY) Award and a role as a brand ambassador for PUMA Basketball. It's taken both style and performance for PUMA itself, which has headquarters in Germany, to rack up nearly 75 years of success providing footwear and clothing for the fastest athletes on the planet, including Ball. In 2021, the company performed as impressively as Ball, achieving a company record for sales in North America. To extend that momentum, the company set an ambitious revenue growth target for the following year.

For the firm's North America region, meeting that target depends on capturing what Rick Almeida, the region's Vice President of e-Commerce, calls "high-heat moments." These include the launch of highly anticipated products like Ball's signature basketball shoes, such as the MB.01 and MB.02.

"While it's been 'set it and forget it' from my perspective, the F5 team is constantly reviewing the attack vectors and modifying our threat mitigation strategies to keep these bots away from us as they evolve."

-Jason Barney, Technical Platform Owner, PUMA Global

Unfortunately, the February 2022 launch of a Melo signature shoe attracted bots in such hordes that they took out the company's Salesforce Commerce Cloud retail site for hours at a time.

"We encountered tremendous demand we haven't before—which is amazing, but it exposed that we were not ready," says Jason Barney, Technical Platform Owner for PUMA. "There's always been little bots trying to buy stuff here and there, but early this year, the floodgates opened, and we were not prepared with the solutions we had in place."

The industry is notorious for sneaker bots, also known as shoe bots, that snatch up high-demand, limited supply shoes for resellers more quickly than human customers can match. Barney says, "We were seeing millions of transactions per second when we are typically operating in the range of 400-500 transactions per second. So it was 10,000 times the normal volume, and it essentially brought down our Salesforce platform for a good part of the day."

Even when the site was operating, the bots foiled a key launch objective—building relationships with the human customers who represented future revenue across PUMA product lines. The e-commerce team scrambled for answers that could address all the impacts, from lost revenue to unhappy human customers. The company's existing anti-bot solution simply wasn't engineered to handle the situation. After attempting triage

Challenges

- Massive surges in bot traffic causing long site outages
- Frustration for loyal customers unable to buy
- An existing anti-bot solution not up to the job
- Extra work for IT staff to restore site availability

Benefits

- Improve the customer experience
- Build brand confidence and loyalty
- Prevent site outages and revenue loss
- Free IT staff for higher-value activities
- · Support business growth

Products

F5 Distributed Cloud Bot Defense >

Like a point guard on a winning basketball team, F5 was glad to assist.

Why F5

F5 experts suggested PUMA try F5 Distributed Cloud Bot Defense. The engagement started with a proof of concept (POC) to ensure compatibility with PUMA's custom headless platform.

"We wanted to see how the solution could fit into our existing infrastructure as cleanly as possible and how effective it was at mitigating these larger-scale attacks," says Barney.

During a five-day POC assessment of PUMA's website traffic, Distributed Cloud Bot Defense evaluated more than 50 million transactions. The solution identified 95% of those as the work of bots. Cart additions, shipping address updates, and credit card transactions accounted for an even higher percentage of automated traffic. Those eye-opening figures were convincing. Over the next couple of months, the PUMA team worked with F5 support to tailor the solution, mitigate bot traffic during shoe launches, and tweak overall performance and bot isolation.

"The F5 solution contributes directly toward our ambitions for future growth."

 Rick Almeida, Vice President of e-Commerce, PUMA North America

Thanks to that experience, Almeida calls F5, "A great partner, not just during implementation but ongoing, with teams working behind the scenes to support us. That enables us to focus on the business."

Once the solution was in place, PUMA North America launched several high-demand shoes, including additions to Melo's signature line, without automated traffic degrading site performance.

Almeida says, "We went from a situation where we were not even taking sales on the site to alleviating that. This solution kept the lights on, so to speak, for new and loyal consumers alike. Now we can focus on the go-to-market strategy and sales, and we can deliver on consumer expectations."

"I don't worry about bot attacks during a shoe launch today," Barney says. "While the fight against bots is an ongoing and evolving struggle that will never have an end date, we're definitely not losing sleep over it like we were. It's been a good solution."

Improve the customer experience to support business growth

Customers benefit significantly, since Distributed Cloud Bot Defense helps more humans buy hot shoes directly from PUMA, rather than from resellers who might charge more. Of course, improved site availability is also important for consumers seeking other PUMA products. In both cases, strong bot mitigation enhances PUMA's ability to build its loyal fan base.

Almeida says, "This will enable us for all future key moments of brand heat in the marketplace."

Free IT staff for higher-value activities

Before implementing Distributed Cloud Bot Defense, attacks and the resulting outages greatly reduced IT staff productivity. "When we were hit in the face by these big attacks, it was an all-hands-on-deck, drop-everything deal," says Barney. Even when the site functioned, staff attempts to block bots inadvertently squashed some desired consumer traffic as well. He says, "Without a solution like this, we basically just took a whack-a-mole approach."

Now, F5's targeted security is both working for PUMA and easy to manage. Barney says, "While it's been 'set it and forget it' from my perspective, the F5 team is constantly reviewing the attack vectors and modifying our threat mitigation strategies to keep these bots away from us as they evolve."

The team has since deployed Distributed Cloud Bot Defense to protect its shopping app, too. Almeida says, "No matter where we're selling our product, we're making sure we're delivering a great experience for our consumers and also protecting ourselves."

He adds, "The F5 solution contributes directly toward our ambitions for future growth."

To help meet those ambitions, ambassador Melo Ball is turning up the brand heat. Meanwhile, F5 Distributed Cloud Bot Defense blocks dynamic attacks to keep PUMA performing at a championship level—through Ball's eventual first NBA Finals and beyond.