

CUSTOMER STORY

Accelerating Snipitz Adoption of DigitalOcean Kubernetes

Snipitz is a multi-screen, interactive video platform that allows viewers to watch multiple angles and additional content around sports and entertainment events in a single player, creating a truly customizable experience for live and on-demand events.

After spending the last few years building the video player and experience, Snipitz had to ensure their solution was highly scalable and production-ready for upcoming events with the Legends of the LPGA in the US and the European Athletics Team Championships in Poland. To prepare, they enlisted the help of DigitalOcean's CI/CD Solutions provider CTO.ai to deliver streaming video infrastructure at scale.

"At Snipitz, we always knew that building a first-of-it's-kind video player wasn't going to be easy, however, the teams at DigitalOcean and CTO.ai were up for the challenge and share the same vision that the marketplace is calling for a reimagination of digital broadcast."

- Andrew Lombardi, Snipitz Chief Product Officer

The Snipitz video player was built on DigitalOcean from the start at the recommendation of their small development team, but when they signed a contract with the Legends of the LPGA the team knew they needed help ensuring their infrastructure could handle a large event. Snipitz needed to move fast, as they only had a limited amount of time before the first big test of their application, so they turned to DigitalOcean for help. DigitalOcean immediately contacted their CI/CD solutions partner CTO.ai.

POWERFUL PARTNERS COME TOGETHER TO MODERNIZE INFRASTRUCTURE FOR AUTOSCALING

DigitalOcean connected Snipitz with CTO.ai, a cloud-based DevOps platform that companies use to automate their development processes, improve developer experience, and increase developer productivity. With CTO.ai, companies can simplify and accelerate Kubernetes adoption on DigitalOcean.

“There became a point where we had revenue coming in and there was a fear that we couldn’t deliver at scale for a large event, with many concurrent users and more than a single stream per user. CTO.ai came in and saw what our current infrastructure was and highlighted the solutions such as DigitalOcean Kubernetes that could scale up and down automatically.”

- Andrew Lombardi, Snipitz Chief Product Officer

CTO.AI MANAGES THE TOOLS AND INFRASTRUCTURE, WHILE SNIPITZ FOCUSES ON NEW PRODUCT FEATURES

CTO.ai started by collaborating with Snipitz to understand their software delivery process and application architecture to identify areas of improvement and deliver a software delivery platform that prioritized developer experience. The next step for CTO.ai was to containerize the Snipitz application so that it could run in Kubernetes. By focusing on the application architecture and delivery process, CTO.ai was able to accelerate Snipitz’s adoption of Kubernetes, while their internal development teams could focus on feature delivery. The collaboration with CTO.ai not only met the delivery deadline for the Legends of the PGA event, but it also delivered a platform for reliable software delivery across all events and customers.

From a technical perspective, CTO.ai uses Github events to trigger container builds that get uploaded to the DigitalOcean Container Registry, with their data and logs stored in DigitalOcean Spaces. Developers create the DigitalOcean Kubernetes infrastructure using Infrastructure as Code templates provided by CTO.ai, and the development team can interact with everything through Slack. CTO.ai automatically captures all of these events and calculates software delivery and operational performance metrics: DORA metrics.

Prior to the introduction to CTO.ai, the Snipitz development team was struggling with infrastructure setup, spending more time trying to set up a scalable system than developing new features for the player. Now they have a platform for delivering containerized applications to DigitalOcean Kubernetes and an improved developer experience.

“Because CTO.ai automatically captures DORA metrics, we can see that our development team’s lead time to change has already improved 45% and deployment frequency has increased 33%. We now have metrics on our performance and how it’s changing over time.”

- Andrew Lombardi, Snipitz Chief Product Officer

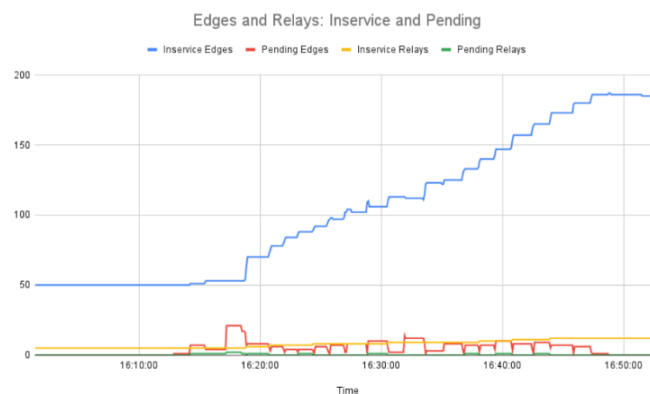
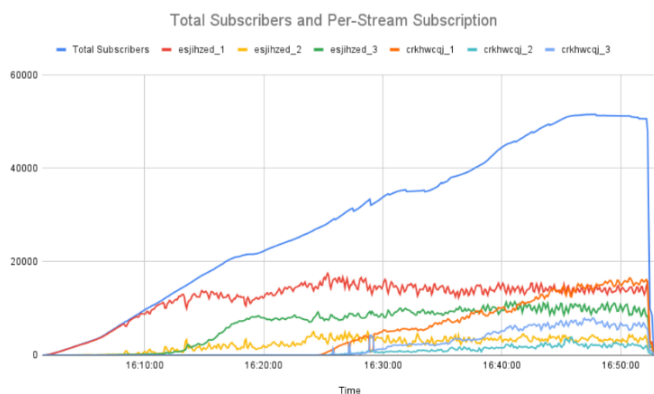
TESTING THE SOLUTION AT SCALE

Before their live debut, Snipitz knew they had to test the infrastructure at scale, so again turned to CTO.ai. The team used the open source Bees with Machine Guns load testing tool, which leverages headless Chrome instances to generate a large number of WebRTC subscribers. The test involved five 2500Kbs streams published to the Red5 Pro cluster. With 50,000 concurrent subscribers on their platform, Snipitz’s application passed the capacity test with flying colors.

50k Load Test Results

The load test was completed with the following highlights:

- In 2 Publishers 720p 2500Kbit/s to transcoder - out 6 streams
- Maximum generated 51k subscribers
- Stream Quality - **GOOD**
- Autoscaling nodes status - **NORMAL**



Snipitz’s load test results with 50,000 concurrent subscribers, highlighting successful autoscaling performance

“Using CTO.ai to build and deploy through Slack is a great experience. It gives us confidence to deliver.”

- Leo Nap, Snipitz Director of Software Development

CONCLUSION

When the time came for Snipitz’s live event with the Legends of the LPGA, the interactive video platform performed seamlessly. The two-day event with 4 screens turned out to be a great experience for all watchers. Thanks to DigitalOcean and CTO.ai, the Legends of the LPGA and the European Athletic Team Championships watched their events for the first time in a new reimagined broadcast.

The partnership with CTO.ai has helped Snipitz create a scalable and low-latency video platform, all while modernizing their infrastructure and enabling their developers to ship features faster with reliable infrastructure.

CTO.ai continues to support Snipitz with managed DevOps as a Service as they build their video platform and ensure it’s ready to scale up.