

FOGHORN PUSHES CROSSFIT GAMES TO NEW LEVEL



FOGHORN

CrossFit is the developer and provider of the CrossFit® strength and conditioning program and a recognized worldwide leader in functional fitness. Founded by Greg Glassman, CrossFit-brand workouts develop strength and fitness while cultivating community and camaraderie in each of the more than 13,000 affiliated gyms in its global network. CrossFit Inc. created and operates the CrossFit Games, an annual competition broadcast on ESPN where elite athletes compete to be named the Fittest on Earth.

1. THE SITUATION

CrossFit chose to host their site on AWS due to its highly flexible yet strong nature. Seems fitting, right? AWS could support traffic spikes by autoscaling in minutes while eliminating the need to purchase hardware that might sit idle during extended periods of the year. AWS' ability to scale quickly, along with their global content management footprint, was a perfect, ahem, fit for CrossFit.



2. THE CHALLENGE

What do you get when you mix a passionate global audience, a slew of participants and events, and extremely time sensitive information? Well, you get sweaty for starters. In reality, you get a huge global sporting event with massive spikes in traffic to games.crossfit.com. So, CrossFit needed to set up a scalable and robust solution to publish workouts and post results to a worldwide leaderboard in real-time. No slow downs. No poor user experiences. No time for water breaks.

To assist with streamlining its platform configuration to increase stability and scalability Foghorn revamped the automated provisioning pipeline by setting up an "AMI CI/CD Pipeline" allowing CrossFit to store all configuration data in code. This helped optimize to AWS using fully baked AMI's greatly speeding up the time to spin up new servers. By leveraging HashiCorp's Vagrant to test Ansible playbooks in development, Foghorn increased the velocity of testing. The CI/CD pipeline was contained within the CircleCI SaaS product. Once a build was validated, CircleCI would execute a script which used HashiCorp's "Packer" tool to create a new AMI within the CrossFit AWS account and then deployed via Cloud to production.





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3X THE TRAFFIC

HALF THE EC2's

HALF THE COST



3. THE RESULTS

The results of the 2016 CrossFit Games were phenomenal. The CrossFit Games attracted over 322,000 participants and the site saw an explosion of **3 times it's normal traffic**. The site scaled elegantly without major issues, and the peak traffic was served with about **half the number of EC2 instances required the previous year**. The post-workout stats? **Foghorn Consulting and the CrossFit team delivered a high level user experience for 3x the traffic at 1/2 the cost.**

Foghorn Consulting was founded in 2008 with a mission to ensure that cloud computing initiatives deliver maximum value for its customers. Based in the Silicon Valley, Foghorn provides domain expertise in strategy, planning, execution and managed cloud services to high-growth and enterprise companies seeking a cloud partner. Our team of DevOps engineers, SRE's and certified cloud architects bring over 20 years of domain expertise to ensure your cloud initiatives are a success.



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