



ALTO9

BigTeams Case Study

June, 2017

About BigTeams

BigTeams was founded by former high school athletes and coaches in order to provide tools that make Athletics Director & coaches' lives easier while providing valuable content for their communities.

BigTeams & Schedule Star provide the most trusted high school sports scheduling, registration, and website products on the market. In business for over 50 years high school athletic programs in all 50 states depend on BigTeams tools every day.

The Challenge

BigTeams, like many other AWS customers, was having great success hosting their infrastructure on AWS. BigTeams had recently acquired Schedule Star, and the merger brought with it technical challenges. The infrastructure had grown recently and AWS costs were growing as well. BigTeams internal tech staff is highly skilled at bringing valuable software to market, but they still wanted to partner with someone skilled at managing AWS costs as well as efficient adoption of new services while working within the team in a fast paced DevOps environment.



Why Alto9?

BigTeams' search for a DevOps partner led them to Alto9, an Amazon APN partner. Alto9's existing expertise in DevOps, SDLC, and High Availability Environments for software companies made us a perfect fit to manage the BigTeams infrastructure, promote best practices, and slim down costs.

The Solution

Alto9 followed the AWS Well-Architected Framework at the onset of the engagement. We took each pillar of the framework and applied it to the BigTeams architecture as needed to identify cost saving measures and other action items. The 4 pillars examined were:

Security

A major change identified in the 'Detective Controls' section is the ability to have centralized logging. Centralized logging has been implemented, giving BigTeams a single access point to get log information, rapidly decreasing the time it takes to identify key issues.

Reliability

BigTeams chose to have a dedicated DBA from Alto9 manage their database performance and reliability. Our expert DBA examined indexes, database structure, and maintenance strategies for optimization. A new backup strategy was created that automated long term storage onto S3/Glacier.

Cost Optimization

Alto9 identified many changes in the cost optimization section, from Reserved Instances (RI) to more efficient scaling procedures to make sure the architecture supply matches demand at all times. Alto9 also sends a detailed weekly spending report for analysis and discussion.

Performance Efficiency

Alto9 identified servers running on classes that were not the most efficient choice. This is a common issue, since the server families change often and companies are not always re-evaluating their server types.

The Benefits

The changes identified in the examination of the '4 pillars' turned into immediate benefits in each area. BigTeams developers have a new centralized logging interface, with integrated service monitoring and dashboards that is integrated with Slack. Reliability is improved after database examination and suggestions were implemented. Servers run on less resources after being put on the proper families, with better scaling policies. After the '4 pillars' examination, BigTeams has saved %20 on their AWS costs, with more reductions planned for the coming months.

