

CASE STUDY

Blue Mantis Helps Professional Sports Franchise Enhance Data Science Integrity Using SDLC Best Practices with Kubernetes and GitOps

Overview

A \$5B professional sports franchise with 500+ full-time employees needed to improve visibility across its network of stadiums and improve the resiliency and fault tolerance of its application infrastructure. Because data is crucial to the organization's success, they needed to ensure it was running on the most modern infrastructure possible to maintain the data's integrity and accuracy for executive stakeholders; managers, coaches, and trainers; broadcasters and analysts; and statisticians. In addition to home-grown applications, the franchise also maintains many utility apps for internal employees, as well as public facing ecommerce apps that process ticketing and payments and need to meet PCI compliance standards.

Solution

Blue Mantis' principal-level engineering team built a custom Prometheus instance with Grafana dashboards for monitoring the stadiums, including IP cameras. Blue Mantis then advised and helped build a productiongrade infrastructure for the client's data pipelines using SDLC and Kubernetes best practices through GitOps (ArgoCD). Blue Mantis also remediated some web application security concerns that had been uncovered during a penetration test.

Business Outcomes

Enhanced Stadium Security & Visibility

With hundreds of games played across their stadium network, including concerts and other events, enhanced security and increased visibility across their infrastructure is crucial to maintain a safe and fun environment.

Improved Data Integrity & Application Resiliency

By deploying modern SDLC and Kubernetes best practices, the team's data scientists now operate on a production-grade infrastructure built to handle the massive amounts of complex data necessary to run a profitable and cybersecure organization.

Met Complex PCI Compliance Requirements

By remediating security gaps, Blue Mantis was able to help the client meet strict PCI compliance requirements for its ecommerce and ticketing system, ensuring the confidentiality of employee and fan data.

At a Glance

Challenges

- Infrastructure visibility concerns across sports stadiums
- Lack of production grade data science infrastructure
- Pressure to meet e-commerce PCI mandates

Benefits

- Minimized cyber risk with security remediation
- Increased safety and observability across their stadiums
- Met PCI compliance for ecommerce applications
- Optimized and enhanced data science infrastructure

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"This particular client embraces modern technology approaches and sets a high engineering standard that other professional sports franchises emulate. Our principal-level engineers worked closely with the client's data science team to advise on best practices, but we also got to roll up our sleeves and use these incredible digital toolsets to help them build a modern productiongrade infrastructure that is helping our client succeed."

Matt O'Donnell Director, Cloud Architecture Blue Mantis