



CASE STUDY

# Protecting PHI, Ensuring HIPAA Compliance, and Scaling a Healthcare Platform with Wallarm



# **Company Overview**

Founded in the early 2000s, this healthcare technology provider delivers cloud-based solutions to support clinical research and data capture across global medical device, pharmaceutical, biotechnology, and animal health studies. The company's reputation for openness, flexibility, and exceptional 24/7 customer support sets it apart from other eClinical and EDC providers.



Over 16 years of experience delivering eClinical solutions



Rapid database build and deployment for trials of all sizes



Support for 1,000+ clinical studies across 70+ countries



Best-in-class operational and customer support



More than 300 active trials at any time



# **The Objectives**

Security was a top priority for the organization. As part of migrating its electronic data capture (EDC) platform to AWS, the company needed reliable, scalable API and application security to satisfy HIPAA compliance and customer requirements. Implementing Web Application and API Protection (WAAP) was essential to protect sensitive PHI (Protected Health Information).

Ensuring the ability to meet HIPAA guidelines for PHI compliance and to provide the service at a reasonable price point were key factors in the decision to go with Wallarm. API security is critical for managing and supporting a complex application like ours. Wallarm was the perfect fit for providing that solution.

Infrastructure Architect, Healthcare Technology Company



# **Solution**

The company required a security solution that could monitor and protect its platform without introducing latency or compliance complications. While several WAAP solutions were evaluated, most competitors required routing all traffic through external proxy servers, increasing both costs and regulatory overhead. Wallarm stood out as the ideal choice due to its flexible deployment model and managed service capabilities.



## **Managed Security Expertise**

Wallarm's co-managed service model allowed traffic monitoring by experienced security professionals, reducing the burden for in-house teams.



## **Hybrid Deployment Model**

Wallarm nodes were deployed within the organization's own infrastructure, ensuring that PHI remained fully under their control and eliminating the need for a Business Associate Agreement (BAA).



## **Containerized Deployment**

Using Docker containers behind AWS load balancers allowed quick scaling and seamless rotation of WAAP nodes. This simplified updates, reduced downtime, and minimized operational risk during vulnerability remediation.



## **Visibility and Control**

Wallarm's web-based management interface provided near real-time visibility into traffic, attacks, and vulnerabilities. Its vulnerability scanning capabilities helped the team identify exposed IPs and potential weaknesses early.



## **Results**

The initial deployment began as a proof of concept to confirm performance and stability under production conditions. After successful testing, the team fully containerized and automated the WAAP deployment, integrated it with existing infrastructure, and connected it to centralized logging via Sumo Logic for visibility.



#### **Customer environment**

- AWS EC2 instances across multiple regions
- Docker-based microservices architecture
- Sumo Logic SIEM integration
- · Automated monitoring and alerting workflows



#### **Outcomes**

- Seamless integration with AWS and containerized environments
- Full compliance with HIPAA PHI protection requirements
- Simplified management through co-managed services
- Reduced burden on internal security expertise
- · Rapid scalability aligned with infrastructure growth



# **Summary**

By selecting Wallarm, this healthcare technology company achieved robust Web Application and API Protection (WAAP) and HIPAA compliance while maintaining operational efficiency and scalability. Wallarm's managed services, flexible deployment model, and proactive vulnerability detection delivered a cost-effective, compliant, and high-performance security solution that continues to support the company's mission to deliver trusted healthcare technology worldwide.

