

CASE STUDY



2024

CLIENT - Riot Games

INDUSTRY - GAMING

About - Riot Games, Inc. is an American video game developer, publisher, and esports tournament organizer. Founded in 2006 and headquartered in Los Angeles, California, the company is best known for its flagship title, "League of Legends," a popular multiplayer online battle arena (MOBA) game. Riot Games also produces other games, including "VALORANT" and "Teamfight Tactics," and develops related media content such as music and animation. The company also plays a significant role in global esports by organizing and promoting competitive gaming tournaments.



FROM SUBCLIP RENDERING TO SIEM IMPLEMENTATION

Riot Games initially collaborated with TrackIt to address challenges related to the rendering of sub-clips within their Iconik Media Asset Management (MAM) system. TrackIt developed a workflow integrating Iconik with AWS services, significantly enhancing the efficiency and reliability of subclip rendering.

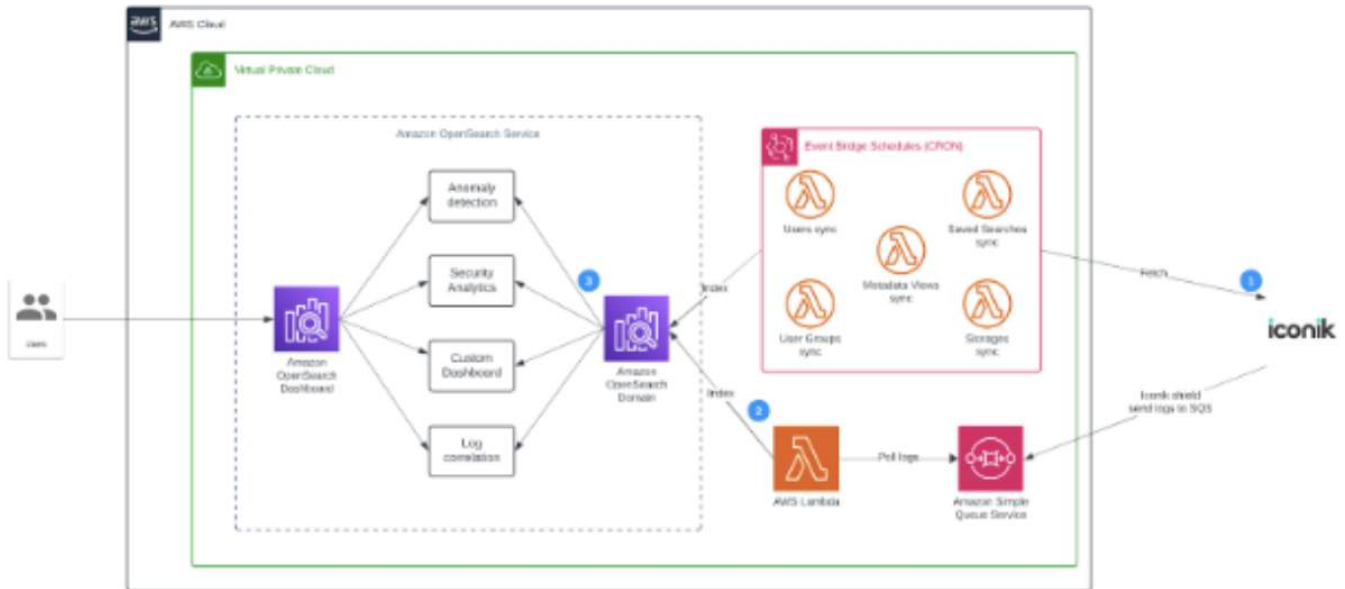
Building on this success, Riot Games approached TrackIt with the idea of implementing a Security Information and Event Management (SIEM) dashboard to enhance its monitoring capabilities and security oversight. TrackIt assisted Riot by providing multiple options to define and develop a comprehensive solution. This case study explores the implementation of the SIEM dashboard and outlines the approach and technologies employed.



"We were looking to better make sense of our logs. We wanted to be able to visualize what's happening in our system and be able to track our user activity, detect anomalies, and fraudulent behavior."

Jeremy Schoen, Solutions Architect, Riot Games

IMPLEMENTATION



Solution Architecture

WORKFLOW STEPS

The workflow utilized Iconik Shield connected to an Amazon SQS queue for log storage. A dead-letter queue (DLQ) was attached to the primary SQS queue to handle message redrives in case of errors.

An AWS Lambda function was responsible for polling the logs from the SQS queue and enhancing them with originating user data and geolocation based on the source IP. The following resources were aggregated for all actions:

- User groups
- Users
- Metadata Views
- Saved Searches
- Jobs

These actions were then indexed into an Amazon OpenSearch Cluster. Dedicated Lambda functions were connected to Amazon EventBridge and triggered on a daily basis to synchronize Iconik users, user groups, metadata views, and saved searches into dedicated OpenSearch indices.

OUTCOME

The implemented OpenSearch dashboards provide rich visualizations, enabling the Riot Games team to monitor user actions on Iconik. These dashboards offer detailed insights into various user activities, allowing for enhanced tracking and analysis. The entire workflow resides within a Virtual Private Cloud (VPC), ensuring that all data is securely contained and managed. Additionally, the use of a VPN connection guarantees restricted access, further bolstering the security measures in place.

Riot Games now benefits from a robust and secure monitoring system, facilitating better oversight and control over their media asset management operations.

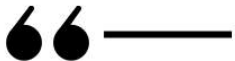


"I love how technical the team is and how they do not wait to ask questions to get a better understanding of our requirements. It is also refreshing to work with a team that proposes solutions while asking questions. This makes it very easy for us to make decisions."

Jeremy Schoen, Solutions Architect, Riot Games

METRICS

- Increased visibility (at least 50%) and ability to monitor user activity at a granular level
- 30% less chance of security anomalies occurring



"I would absolutely recommend TrackIt to companies looking to implement solutions on AWS. I do, however, have a recommendation for any company looking to engage TrackIt. You need to be ready for a higher level of involvement. This means being responsive, answering questions on time, and assisting the team with any requirements they may have to deliver the best solution for you. TrackIt offers the proximity of an internal team but the flexibility of an external vendor."

Jeremy Schoen, Solutions Architect, Riot Games



TrackIt is an international AWS cloud consulting, systems integration, and software development firm headquartered in Marina del Rey, CA.

We have built our reputation on helping media companies architect and implement cost-effective, reliable, and scalable Media & Entertainment workflows in the cloud. These include streaming and on-demand video solutions, media asset management, and archiving, incorporating the latest AI technology to build bespoke media solutions tailored to customer requirements.

Cloud-native software development is at the foundation of what we do. We specialize in Application Modernization, Containerization, Infrastructure as Code and event-driven serverless architectures by leveraging the latest AWS services. Along with our Managed Services offerings which provide 24/7 cloud infrastructure maintenance and support, we are able to provide complete solutions for the media industry.



- AWS WAF Delivery
- AWS Lambda Delivery
- Amazon EKS Delivery
- Amazon DynamoDB Delivery
- Amazon CloudFront Delivery

- Amazon API Gateway Delivery
- Amazon OpenSearch Service Delivery
- Well-Architected Partner Program

- Migration Services Competency
- Media & Entertainment Services Competency



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