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Business Domain

EdTech

Project Type

AWS solution

Intetics Improved Educational Platform's Security and Performance In 1 Month

Client

The Client is a global EdTech platform that provides educational services to millions of users. It has rapidly evolved during the pandemic, attracting more and more students.

Project

Delivering the maximum level of security for a new customer-facing API alongside site performance improvements.

Objective

The Client wanted to enhance the performance of their publicly available website and data reporting, as well as protect static content in the Amazon S3 object storage.

Team Reinforcement

To improve the educational website's performance and security, the Client was searching for a trusted IT partner with proven experience in using AWS WAF (Web Application Firewall) and Authorizer@Edge technologies. Intetics offered the required experience, expertise, and the best working conditions.

Challenge

The Client is a global provider of EdTech solutions, whose website is publicly available and visited by millions of users daily.

The Client’s website suffered from crawler scans, which produced a lot of page views, caused performance drops, and affected data reporting. Static content stored on Amazon S3 was not protected.

The Client looked for an experienced IT team to suggest and implement an AWS solution.

Quick Facts

- ✓ 15% of crawler traffic is automatically blocked
- ✓ No outages caused by crawler scans
- ✓ The solution was delivered within 1 month

Technologies

Python and Lambda@Edge / CloudFront / S3 / WAF / CodeBuild / CodePipeline / CloudWatch AWS services

Solution

★ 01

Implementing a combination of AWS technologies enabled the set up of authorized access to data, improving the site’s security, reducing the load, and, therefore, enhancing data reporting and the overall user experience.

★ 02

To accelerate access to data, CloudFront was attached to the core platform.

★ 03

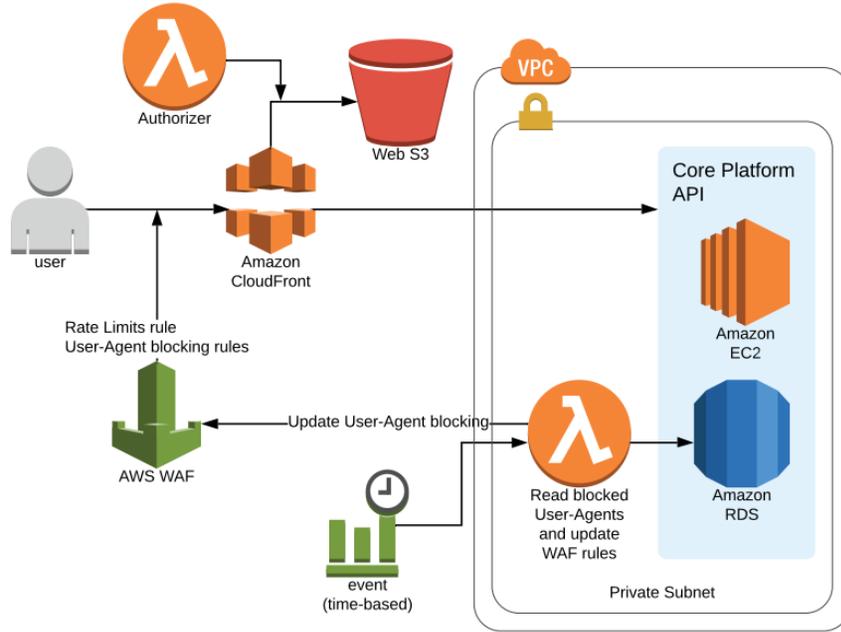
To set up authorized access to the static content stored on Amazon S3, the team used Lambda@Edge to build Authorizer@Edge that verifies JWT tokens.

★ 04

To address a number of performance and security problems, a serverless solution was introduced. It was based on Python and Lambda@Edge, CloudFront, S3, WAF, CodeBuild, CodePipeline, and CloudWatch AWS services.

★ 05

The team managed to provide high-level security and enhance the performance of the publicly available website with AWS’s set of tools.



Client Reference



Intetics thoroughly analyzed the existing problems, suggested a complex AWS solution, and quickly implemented it. This allowed us to improve the platform's performance and security within 1 month.

CTO

Benefits and Results

- ★ Implemented AWS solutions give the Client's platform students a better user experience.
- ★ Site performance and stability have improved since there are no outages caused by crawlers or bots.
- ★ 15% of traffic generated by crawlers and bots is blocked automatically.
- ★ The team implemented the AWS solution within 1 month.