

Indian PSU Service Provider Improves Website Performance with mFilterIt



A national tourism service provider's website was impacted by bots. This further resulted in friction among the users and led to various problems related to customer experience. mFilterIt helped them to weed out invalid traffic and improve their overall performance.

Solution Provided

When someone visits the website in the backend, a request is triggered API gateway through which the data comes to our systems. When the Kinesis data stream reaches the threshold, it triggers the Lambda for processing the data. While triggering the data it will also backup the same data into S3 Bucket. A separate S3 Bucket is created for each client.

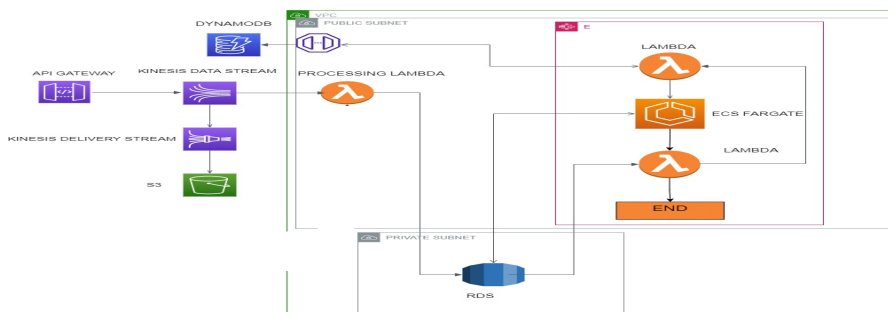
The Lambda will execute the rules to detect and eliminate invalid traffic sources. Once the checks are made, further data is processed and stored in RDS. RDS is the platform that uses My SQL as the database.

AWS Lambda and ECS Fargate is used for batch processing and orchestration. For configuration management and data lookup on demand database Dynamo DB is used. The RFA rules are run on Lambda and OFA rules are run on the ECS Fargate & STEP function. Real time and offline processed data come to RDS, and the final data gets consolidated in tabular form to provide deeper insights.

The sorted data gets displayed on the client dashboard or send to the client in form of reports.

After a month data retention at RDS, it will get stored into S3. Thus, all raw data is stored in an S3 backup client bucket for at least a year, if required the duration could be increased on client requirement. In case of any discrepancy or need to fetch data again. Required data can be retrieved from S3 and reprocessed whenever required.

This entire system is created to process raw data and provide the client with actionable insight on the dashboard or in form of reports. We have the capability to block bot traffic in real-time by using a similar setup depending on the client's requirement



Result: We implemented various checks on the data to weed out invalid traffic. Using the capabilities of AI, ML and data science, we detected 40% of bot traffic. Once the invalid sources were removed, the performance of the website improved as cleaner traffic started coming.

ABOUT CLIENT

A wholly owned subsidiary that provides services like ticketing, catering, and tourism services for the Indian Railways.

CHALLENGES OF THE CLIENT

The PSU client was facing challenges related to their website performance. Despite taking every measure, their system frequently faced slowdown due to the incessant amount of bot traffic interacting with the website.

Due to bot traffic, the client's customer experience was impacted while browsing the website and they faced problems while making transactions.

Why AWS?

Amazon Web Services - A comprehensive platform that provides scalable, flexible, reliable, easy-to-use, and cost-effective cloud computing solutions developed with a combination of the platform as a service (PaaS), infrastructure as a service (IaaS), and packaged software as a service (SaaS) offerings.

The AWS (Amazon Web Service) provides a comprehensive platform with scalable, flexible, reliable, easy-to-use, and cost-effective cloud computing solutions infrastructure, and a dynamic database which ensures a complete automation pipeline and reduces additional infrastructure costs.

- Cost-effective storage and retrieval of data
- Can serve any level of request traffic
- Store, process and consolidate incoming data on the client web or app
- Automation of manual data input into processed segregated data
- AWS makes the entire process seamless, swift, and secure.

Challenges

- One of the major challenges that the client had to confront was handling the massive influx of traffic manually.
- The client was in urgent need to weed out invalid traffic and consolidate incoming data. The detection of fraudulent leads was also a cause of concern.

How good we are at lead fraud detection?

The biggest hurdle in lead optimization are:

- Tracking and monitoring of leads as many advertisers use GA as an attribution tool which has challenges of pixels deployment, integration and detecting the malware in pixels.
- Another biggest challenge is identifying the poor quality of traffic as many leads end up being junk and result in cost impact on the call centre.
- Transferring the disposition data to the tracking platforms.
- In some cases, the publishers bid on brand keywords for generating leads. This can result in high bid rates on a google search by the advertiser.
- Due to invalid creatives used by publishers/affiliates, they make false promises and invalid offers.

mFilterIt's advanced lead management and scoring solutions help to detect junk or fraudulent leads and update them on CRM in real-time. This helps marketers to validate the leads coming from affiliates and avoid issuing a payout to the ones providing bad leads.

- This also helps to optimize the call centre bandwidth
- The tool also blocks traffic coming from bad sources and helps to improve the quality of the traffic.

We are having the capability to block bot traffic realtime by using the similar setup depending on the client requirement.

About mFilterIt

mFilterIt is a new-age company that caters to protecting digital integrity across platforms. We believe in the power of deep tech and data science to create transformational growth in our customers. We empower our customers with a holistic view of their respective journeys in the digital ecosystem by providing them with real-time accurate data that helps them understand their returns on digital investments.

We have worked with more than 500 clients across 15 countries globally. mFilterIt provides a variety of innovative and comprehensive IT solutions. We deliver quality services in the most efficient way, and our experts will work collaboratively with you to customize our offerings to your particular needs.

