

High Performance Platform for a Mobile Advertising Network

Netherland-based, global mobile ad network bringing 50+ publishers and 300+ advertisers together. The network applies extensive rule-based tools to run targeted ad campaigns. The network runs 1B+ daily impressions and runs 1000+ daily campaigns.



Performance Engineering is key to optimizing IT infrastructure and enhancing application experience

Challenges

- Availability and Scalability issues after moving to the cloud
- Implemented much larger IT infrastructure than required
- Consequently, high cost of running the IT Infrastructure

Solution

Consulting: AWS Infrastructure was redesigned

Application Performance Reengineering: Application code refactoring and Data layer redesign was done

Additional Product Functionality

- Built Fraud detection and prevention module
- Rule-based auto-assignment and auto redirection of campaigns and auto-blocking
- Integration with global IP database
- Built web crawler in Python to trace to advertisement redirection

Managed Service: Ongoing Apps/Infra monitoring and maintenance

Performance Testing: Stanra built a test bed on AWS and executed the load and endurance test, optimized CPU and I/O utilization

DevOps: Stanra developed the Application code build and release automation

Digital Integration: API Integration with Advertisers and Publishers using AWS API Gateway. Development of an API dashboard to monitor and control API usage.

Innovation

- Infra Cost Reduction by as much as 75% while improving functionality
- Performance Reengineering to optimize IT Infrastructure
- Near real time Analytics for enhanced visibility to metrics, and digital integration to reduce work effort

Benefits

- Stanra reduced infrastructure costs by 75%
- Reduced CPU Usage and Time taken for DB Operations
- Application scaling from 20M txns per day to 85M txns per day on reduced infrastructure
- Analytics: Advertiser-wise, publisher-wise and campaign-wise, geo-wise real-time analytics and revenue leakage prediction

Result Highlights

Infrastructure Cost Reduced by 75%

Application Scaled Up by 325%

Setup Real-Time Analytics for Better Visibility