# MANAGE MAJOR INFRASTRUCTURAL AND SECURITY CHALLENGES WITH XORIANT CLOUD AND SECURITY "EVERYTHING-AS-CODE" AUTOMATION FRAMEWORKS

Fixing load balancing and server weight issues improves reliability, service delivery & security

## Client Background

The client is a leader in Demand Side Platforms (DSP) For Programmatic Advertising with a global footprint of 11 datacenters with over 5000+ systems and 60 PB of Hadoop data. The client faced difficulties managing load balancing and server weights for 7000+ internal DNS records, leading to reliability, service delivery and potential security issues.

## The Client's Objectives

- Secure the perimeter.
- Automate the deployments.
- Achieve on-demand commissioning of bidders, Adservers, Hadoop nodes, relevant analytics, and revenue recognition services.
- Ensure monitoring for all relevant KPIs.
- Automate infrastructure provisioning.
- Automate known issue resolution based on events.
- Automate patching.
- Automate security implementations.

## Xoriant Solution | Key Contributions

The client chose Xoriant as its technology partner considering its longstanding relationship with AWS as an Advanced Consulting Partner, and three decades of experience, expertise, and adherence to industry best practices.

## KEY BENEFITS

- Reduced the mean time to repair by 70%
- Lowered the provisioning time for multiple different services from hours to minutes
- Reduced $150,000 in annual spend
- Delivered 80% reduction in threats and attacks
- Strengthened SSL to assure security on ads served
- Enabled 0 day patching across all systems

The key contributions to this engagement included:

- Architecting and deploying 70% of automated DevSecOps lifecycle using homegrown solution.
- Infrastructure as Code for managing infrastructure using tools such as
  - Kickstart, Python Fabric, Puppet, RoR-based CMDB, Hiera, Rundeck, Ansible
- Monitoring as Code to monitor services and infrastructure including automated workflows for incident remediation using
  - Rundeck, Nagios, Thruk
- Security as Code to implement security controls across infrastructure such as network ACLs, HIDs implementation, firewall configs, etc.
- Security as Code to automate and secure certificate management, session management and credential management with
  - HashiCorp Vault, LetsEncrypt
- Managing the dynamic updates to DNS through custom functions in Ruby, invoked by Puppet running on DNS servers.

## Client Testimonial

*Xoriant is the go-to security partner with a strong team that understands the domain. They bring to the table security with business context and AWS advanced skills to add to on-prem skills. They are our trusted advisors.*

## Technology Stack

**Ruby on Rails | Puppet libraries for CMDB | Puppet | Hiera | Git | Gerrit | Jenkins | SonarQube | Selenium SE | OpenGrok | Rundeck | Nagios Grafana | Graphite | ELK | Jira | Fisheye | Nagger | Catchpoint | New Relic | Docker | Kubernetes | HashiCorp Vault | AWS**