

Automation Logic

AWS Migration at the Legal Aid Agency



Executive Summary

Automation Logic were engaged by the Legal Aid agency (and continue to be engaged today) to enable their migration to AWS public cloud. To date, 8 of the Legal Aid Agencies applications have been migrated to AWS. This has led to significant cost savings due to reduced hosting costs compared to the previous on-premise provider. Additional benefits include; increased monitoring and alerting, tighter security, better repeatability, and flexibility. Downtime has also been reduced and the applications are now more resilient.

Customer Challenge

LAA were seeking all of the benefits moving to a cloud platform brings; additional resilience, newer hardware, and reduced costs and had an immediate challenge to migrate applications sitting in an on-premise data centre to the cloud.

In addition, their existing data centre was no longer being supported and LAA were beginning to accrue a large amount of technical debt. Migrating to cloud, with a centralised team to manage the work is helping them to reduce cost and increase reliability.

Partner Solution

How we moved the applications - using AWS CloudFormation and AMIs, the database servers are pre-configured with all the software the DBAs need. A blank database is initiated which means all data is carried over quickly and efficiently during the import. The process is then repeated for each of the 5 environments via AWS CodePipeline, hosted in a Shared-Services account, alongside shared s3 buckets and cross-account security/monitoring.

AL has built the AWS infrastructure, the servers, databases, storage and necessary prerequisites. Their counterparts, the DBAs from LAA, have been focused on migrating the actual data over from 6DG to AWS. All this is done whilst upskilling the team to better ways of working and understanding industry aligned technologies.

Technologies used:

- AWS resources deployed and managed via Cloudformation
- EC2/ECS servers/containers for applications and databases
- RDS
- S3
- CodePipeline
- Legacy Oracle Database and Applications

About LAA



The Legal Aid Agency is an executive agency, part of the Ministry of Justice.

LAA provides civil and criminal legal aid and advice in England and Wales.

LAA have stated their priorities are to:

- **Improve legal aid case work**
- **Grow their capabilities by investing in staff development and improving the work environment**
- **Work with partners to deliver change by, for example, increasing online working**

Results and Benefits

The previous data centre cost roughly £3 million a year for 8 applications. This is above the market average of current cloud hosting costs. By March 2021, following the successful migration to cloud, the largest and most actively used environment (Development) is costing ~£25,000 p/m (£300,000p/a) to host, with many more cost savings in the pipeline.

Aside from that, the new hosting platform itself has brought about a range of benefits:

- Increased monitoring and alerting using AWS CloudWatch
- Increased security - the new technical architect will be using WAF v2. Improvement from manually updating rules.
- AWS CloudFormation allows automation, repeatability, and flexibility.
- Reduced hours in changes, as less downtime is required due to increased automation and testing
- Replacing Dedicated Servers with Lambda scripts providing significant cost reductions

Automation Logic also continues to work closely with LAA to upskill their existing team and embed improved ways of working based on industry best practice.

“The LAA team have successfully migrated the applications to AWS with no issues reported! The team have been working really hard in the pandemic with dedication and focus. The first migration of many!”

Delivery Manager, LAA

About Automation Logic

Automation Logic is proud to be an Advanced AWS Consulting Partner and part of the AWS Public Sector Programme.

We hold over 50 AWS certifications. Our team of expert consulting engineers embody our common mission, to share with our clients everything we know about DevOps and build them the new kind of teams and infrastructure they need to thrive in the digital economy.

