





HELPED BLS INTERNATIONAL ACHIEVE A SCALABLE AND SECURE INFRASTRUCTURE WITH **CLOUD MIGRATION, DEPLOYMENT & MANAGED SERVICES.**

Start Date – 12th December 2018 Status – In Progress



CLIENT OVERVIEW

A recognized pioneer in the arrangement of Government to Citizen (G-to-C) administrations, Company has earned itself an immaculate notoriety for setting benchmarks in its space of skill. This mission for magnificence has seen its development exponentially, finished the most recent twelve years, to set up itself as an accomplice of decision for customer governments around the world. Utilizing its overwhelming position and business openings in fast development advertises, the association is presently ready to drive transformational advancements in the G-to-C Business all inclusive.



CONTEXT

The company is a part of the four decades-old group with a global presence and diversified range of services in polymers and petrochemicals, education, electronics, asset management, visa processing and management consulting.

Client's quest for excellence has seen its growth exponentially, over the past decade, to establish itself as a partner of choice for G-to-C Business worldwide. With its dominant position and business opportunities, client wanted a highly scalable IT infrastructure which is also Esquema Nacional de Seguridad (ENS) High certified.



KEY BUSINESS CHALLENGES

- Migrating to an infrastructure which is highly available, scalable, secure and is also Esquema Nacional de Seguridad (ENS) certified.
- Securing the web application from cyberattacks. Protection from Distributed Denial of Service (DDoS) for their website and application.



SOLUTION

Progressive's certified AWS Solution Architects conducted an exploratory analysis to study the current architecture of the application and the requirement, for cloud assessment. AWS was the cloud of choice with which client could move faster, operate more securely, and save substantial costs; all while benefitting from the scale and performance of the cloud and Amazon Web Services (AWS) is Esquema Nacional de Seguridad High certified. This certification establishes security standards that apply to all government agencies and public organizations in Spain, and service providers on which the public services are dependent on.

Once the existing architecture was explored, Progressive's team formulated a detailed migration approach

- · Assessment of the existing architecture and existing network and security configuration
- Migrating the production environment onto AWS, setting up AWS infrastructure.
- Cost optimization of AWS infrastructure after migration of the production environment.

TECH STACK

- AWS EU (Frankfurt) region was chosen for hosting the severs for compliance as the AWS EU region is covered by ENS high certification.
- AWS Web Application Firewall (WAF) & Shield were deployed for security for web application and Distributed Denial of Service (DDoS)
- Multi A-Z environment was deployed to host the web-servers and applications servers of Linux and Windows
- Enabled IP whitelisting for internal Private IPs
- Elastic Load Balancing (ELB) was deployed to reduce latency
- Amazon Elastic File System (Amazon EFS) was used to provides simple, scalable, elastic file storage
- Amazon CloudWatch, AWS CloudTrail and AWS Config were used for monitoring, governance and evaluation of the AWS infrastructure.



SOLUTION ARCHITECTURE

AWS EU (Frankurt) Region 24X7 Monitoring from Progressive NOC Cloud Watch & Cloud Trail windows Application Server Server VPN Backup On-Primises **Public Subnet** Public Subnet S3 Bucket P2S VPN Web Server Linux ₽₽ connection Linux Application MySQL Slave windows Application Server(Not Active yet) Users Availability Zone 2