

Trilasoft Migrate from AWS N. Virginia to European Region

Introduction

Trilasoft, Founded in 2007, Trilasoft works passionately to bring ideas to life and create applications for start-ups and enterprises. The company offers its customers a unique value proposition to meet their transformation and innovation challenges. Trilasoft supports its customers through the entire development lifecycle, from conceptualization and designing to implementation and ongoing maintenance, to ensure products and services meet the requirements of tomorrow.

Business Need

The customer is expanding its operations in European Region, and to operate in that region, it had to comply with regional GDPR rules. Hence they would like to migrate their Application & Infrastructure from the AWS N–Virginia region to AWS European Region.

» AWS Services

AWS WAF, ALB, NAT, EC2, RDS, EFS, S3, CloudTrail, Glue, Accelerator, Lambda, CloudWatch, SNS



- » A separate isolated and secure environment in the European AWS region to develop applications for their end customers.
- » Ensure no data is lost during migration from one region to another, and their integrity & accuracy should be maintained.
- » The entire migration activity should complete within the least possible downtime.
- » A highly reliable and durable solution to store their data & keep it safe from theft or loss.
- » Make use of AWS-managed services for database and filesystem services.
- » A centralized identity management system is in place to track & manage access smoothly.

Solution Approach

Our AWS Certified Solutions Architects conducted detailed workshop sessions with the customer to understand their existing setup, challenges, and migration requirements. In the discovery, we also captured information about the data size to be migrated and affordable downtime.

Following the solution, an approach was proposed and implemented with best practices, and then migrate their production workload to AWS;

- » A separate network with a combination of VPC/Subnets was created as per the best practices.
- » All the servers and databases will be in a private subnet to match their current architecture.
- » The "Backup & Restore method" was adapted to migrate EC2 instances and RDS instances from N-Virginia Region to the Stockholm region.
- » DataSync was used to transfer data from one region to another.
- » AWS WAF was set up to protect AWS resources from SQL injection, cross-scripting, and DDoS attacks.

- » Application auto-scaling is configured to scale our EC2 instances as needed during sudden growth in the user request.
- » A read replica of RDS was set up to improve read performance from the database.

Reaping Rewards

- » Since all data and workloads are moved to the European region, the customer could operate its business for European clients following GDPR rules.
- » AWS WAF firewall provided an advanced level of data protection.
- » By configuring RDS replicas, application read response time greatly improved.
- » Configuration of application auto-scaling enabled provisioning of new instances as the user request/load increased, improving application performance.
- » Data stored is maintained, and automated backups are ensured by performing regular data backup/restore drills.

