LOGISTICS

CLOUD DEPLOYMENT & MANAGED SERVICES

HELPED ADITYA BIRLA GROUP (SSOE) BUILD A RELIABLE AND SECURE INFRASTRUCTURE WITH **CLOUD DEPLOYMENT & MANAGED SERVICES.**

CLIENT OVERVIEW

Aditya Birla Global Trading, formerly known as Swiss Singapore Overseas Enterprises Pte Ltd. (SSOE), is a leading bulk commodity trading solutions provider and logistics partner to customer around the world.

Incorporated in Singapore in 1978, the company's annual turnover is USD 7.5 billion with annual trading volumes exceeding 35 million tons. With a presence in over 20 countries, Aditya Birla Global Trading serves over 10,000 customers across the globe. It offers sourcing and marketing of physical commodities like coal, petroleum products, sulfur, iron and steel, fertilizers, agricultural products, and tea.

Along with a dedicated shipping desk, Aditya Birla Global Trading is equipped with on-ground logistics facilities such as warehousing, tankages, and port stock-up.

CONTEXT

Connecting Customers to Commodities

We are one of the most diversified commodities traders in the world, handling 30+ different commodities across agri-products, agri-inputs, energy, and metals.

We help feed the world, build the world and run the world by creating access to essential commodities required today and tomorrow. We provide last-mile solutions that allow us to impact local communities directly.

KEY BUSINESS CHALLENGES

- Managing a highly scalable, secure, and robust infrastructure.
- Managing a dynamic cloud infrastructure.
- Managing the SAP infrastructure connectivity with different vendors.

SOLUTION

Centilytics' Certified AWS Solution Architects performed a comprehensive exploratory analysis to examine the application's existing architecture and its specific requirements. AWS was the customer’s preferred cloud provider as it offered enhanced speed and heightened security. Leveraging the scalability and performance of the cloud, the customer enjoyed a seamless transition while reaping substantial benefits.

After the analysis, Centilytics’ team redesigned the SAP Connectivity Flow, and provided the following Solutions:

- Assessment of the existing architecture and existing network and security configuration
- Redeploying the applications onto AWS.
- Cost optimization of AWS infrastructure after migration of the infrastructure.

TECH STACK

- AWS Singapore region was chosen for hosting the servers.
- Different regions were chosen for storing the cloud backups.
- WAF protection was enabled.
- Network Load Balancing (NLB) was deployed to reduce latency.
- SFTP Server with the combination of Network Load Balancer used for the connection.

- Amazon Transfer Family, WAF, CloudWatch, AWS CloudTrail, and AWS Config were used to monitor, govern, and evaluate the AWS infrastructure.

SOLUTION ARCHITECTURE

SOLUTION APPROACH

Assessment & Solution

- Assessment of the existing architecture, network, and security configuration
- Cost optimization of AWS infrastructure after migration of the production environment.
- Multi Environment Server was deployed to host the SFTP Service for SAP Connection.
- Network Load Balancing (ELB) was deployed to reduce latency.
- Amazon Guard Duty, Amazon CloudWatch, AWS CloudTrail, and AWS Config were used to monitor, govern, and evaluate the AWS infrastructure.

DEPLOYMENT

- The deployment planner had all the milestones and timelines mentioned which ensured that the project was completed on time.

VALIDATE

- Post successful deployment of resources on the cloud, the infrastructure was validated on all the pointers (security, accessibility, etc.) before handing it over to the customer.
- After the application was tested by the customer on all the parameters, a cut-over date was agreed for Go-Live.
- Post-Go-Live, a validation tracker was sent to the customer, which ensured all the agreed activities had been performed.

TRANSITION

- Smooth transitioning and handover to support was ensured by having proper KT sessions with the team and introducing them to the customer.
- Inventory, Credentials, Security Status, Server Hardening & Patching, and best practices operational checklist were handed over.

TOOLS AND SERVICES USED

- Native AWS monitoring services (CloudWatch, CloudTrail, Config) for auditing and monitoring. Nagios XI, one of the third-party monitoring tools, was also configured to monitor the infrastructure.
- Integration of both Native and other monitoring tools with the ITSM platform (Zoho Desk) improved real-time incident management experience. Even change and CI items were managed properly.
- Centilytics is being used as the cloud management platform for providing better visibility and managing spending on the cloud. Also, Centilytics made reporting and governance easier for the customer.

OS PLATFORMS | WINDOWS & LINUX

DESIGN CONSIDERATIONS

- Security by design solution architecture
- Segregation of subnets based on workload.
- S3 bucket was created for storing objects.

OPERATIONAL BEST PRACTICES

BACKUP & DR

A native image-based incremental backup is triggered for Backup of EC2 instances. This will further be integrated with our in-house auto-backup tool for automatic scheduling and alerting of every successful and unsuccessful backup.

TAGGING RECOMMENDATIONS

AWS resources were tagged as per the agreed naming convention & AWS best practices

SERVICES USED

EC2, VPN Gateway, Security groups, S3, AWS Marketplace, Amazon Transfer Family, WAF, CloudWatch, AWS CloudTrail, and AWS Config, GUARD DUTY, KMS

OUTCOMES

AWS was the cloud of choice which ensured that the customer could move faster, operate more securely, and save substantial costs; all while benefiting from the scale and performance of cloud. The customer had opted for 24x7 managed service support where Centilytics is offering Proactive Monitoring, support, advisory, and management of the infrastructure. As part of the managed service deliverables, Centilytics is committed to providing a better customer experience through Alert Management, Security Controls, and Infrastructure and Cost Optimization. A scheduler also functions during the customer's business hours.