

UST helps a US technology company migrate Email Services to Cloud with AWS



Executive Summary

The customer is a technology company that provides IT products and services across five major technology areas: Networking (including Ethernet, optical, wireless and mobility), Security, Collaboration (including voice, video, and data), Data Center, and the Internet of Things.

Customer Challenge

A proven industry leader, this customer's secure email service which is hosted in US and Europe data centers delivers comprehensive protection for cloud-based email by stopping ransomware, phishing, spoofing, business email compromise, malware, and other common cyber threats. It protects against malicious content, remediates attacks, and prevents loss of sensitive information. It becomes crucial to empower the application with stability to avoid any kind of hindrance in the ongoing process.

Increase business agility

The customer looked to increase its business agility so it could quickly and creatively respond to customer demands with improved internal collaboration and optimized go-to-market and IT service delivery capabilities. Modernizing IT functions, and making them more responsive, was critical to achieving these goals.

Decrease disruptions

Any disruptions to them would result in lost revenue. Disruptions would also negatively affect other aspects of its technology strategy. As part of cost optimization and enhancement of the current deployment environment.

Why UST

Given the scope of the project, the customer wanted to work closely with an experienced cloud migration expert. The company approached UST, and this was a massive project that required a joint effort between UST and the company. UST practice is to begin with an in-depth analysis of their data, workloads, and applications. In addition to technology, the project also involved assessments on IT processes, people and skills, security and compliance practice, and cloud operations.

About the Customer

The customer is a US technology company that is best known for its networking products. Headquartered in California. Products in this category are a range of routers, switches, wireless systems, security systems, WAN acceleration hardware, energy and building management systems and media aware network equipment.

Benefits

- Reduced IT operations costs
- Increased business agility and optimized go-to-market capabilities
- Simplified IT infrastructure and applications; accelerate provisioning and service delivery
- Improved security

AWS Services

- AWS EC2
- AWS Route 53
- AWS CloudTrail
- AWS S3
- AWS CloudFormation

About UST

For more than 20 years, UST has worked side by side with the world's best companies to make a real impact through transformation. Powered by technology, inspired by people and led by our purpose, we partner with our clients from design to operation.

Through our nimble approach, we identify their core challenges, and craft disruptive solutions that bring their vision to life. With deep domain expertise and a future-proof philosophy, we embed innovation and agility into our clients' organizations—delivering measurable value and lasting change across industries, and around the world. Together, with over 26,000 employees in 25 countries, we build for boundless impact—touching billions of lives in the process. Learn more at ust.com.



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Solution Provider

UST Solution

To achieve the customer's multiple business goals, we constructed a phased approach. The project was split into three phases:

- Phase 1: Cloud architecture build and deployment onto AWS cloud.
- Phase 2: Migration of Beta customers onto AWS
- Phase 3: Plan & migrate existing customers onto AWS.

Drawing on UST's experience in modernization of tightly coupled applications, the team was able to build out a comprehensive plan to achieve this goal. New architecture diagrams and documentation were created for each component of the solution.

A Rehost (Lift and Shift) model was followed to migrate the project from on-premises to AWS cloud. Infrastructure builds and deployments were automated through AWS CloudFormation templates. Application Deployments and migration of customers were done through Ansible scripts and custom python boto3 scripts.

Nagios, log monitoring service, is hosted on AWS EC2 instance. NagiosXI is used as the 24/7 monitoring, alerting and dashboarding solution for the cloud instances. EC2 instance roles were created and associated with each VM that hosts the application components. Nagios Masters and Pollers were deployed in Operations VPC in each region and with each region's Nagios instances monitoring the production instances in that region. Automatic ticketing is achieved in JIRA for the alerts received via monitoring, Integration between Nagios masters and Jira ticketing tool via Rest API.

The resiliency for the application was managed completely using highly available AWS resources where it runs in multiple availability zones/ regions and completely managed by AWS. Leveraging these AWS services paved way for an elastic and fault-tolerant system. Cloud Trail was enabled on all Staging and Production environments. The log files were redirected to specific S3 buckets to which access was restricted. The bucket was encrypted using AWS KMS keys. High Performance, Fault tolerance and High availability are achieved using Ec2 under Auto-scaling, ALB, MySQL RDS with Multi-AZs and Rout 53 services.

Why AWS?

In the era of rapid technological change, the cloud is not only useful for backup and storage, its key for future-proofing businesses and maintaining a competitive edge. Businesses moving mass amounts of data to the cloud can take advantage of the latest technology and move away from aging on-premises infrastructure, putting them at the forefront of innovation.

Migrating to Amazon Web Services (AWS) unlocks efficiencies and operational benefits that businesses never knew were possible. From lower costs to increased speed, AWS helps businesses focus more on core competencies and reimagine how they work and how they innovate.