

CUSTOMER CASE STUDY

Minimum Downtime, Cost Efficiency & Faster Go To Market for **OneShield**

A prominent US based software provider with offices in India, Canada and Australia. They offer 46 products in all and are currently expanding to Europe. Designed for all markets, the versatile SaaS platform is being heavily leveraged by the FSI sector to solve challenges in policy, billing and business analytics. Their clients include well known businesses like Advantage Insurance, Allied World, Montpelier, Omaha National and The Hanover Insurance Group.

OneShield empowers its clients to provide insurance in a user-centric way through technology, helping them gain the competitive edge. Their portfolio consisting of a range of products like enterprise class policy management, billing, rating, business intelligence, product configuration and claims is deployed in the cloud. Their targeted solutions automate and simplify processes, ensuring seamless upgrades, collaborative implementations and considerably lower costs.

To offer efficient services and help their customers stay on top, a business like OneShield has to ensure high availability, agility and automation. They also require the following to remain efficient and ensure excellent customer experience:

- Capability to implement new apps quickly while onboarding new clients or upgrading existing ones but at lower costs
- Be able to meet high demand and scale quickly
- Adapt to changing client needs
- Create solutions for expanding globally
- Be prepared with cost effective storage capabilities anticipating growth

OneShield has a bouquet of clients who are leaders in FSI. Their critical development operations were originally being carried out from Tata Communications Ltd (TCL) Data Centre in Delhi. For every customer, OneShield has a different environment consisting of a few servers and they had 120+ servers including those for customers and infrastructure management such as Active Directory, AV, Backup etc. when Umbrella engaged with them. The development team was accessing apps and servers from their Gurugram location.

Lacking in efficiency, speed and poor disaster recovery, they decided to migrate to public cloud.

Umbrella-AWS Solution for OneShield

- Successfully conducted pilot to migrate one app & a few infrastructure servers to AWS Cloud
- Migrated close to 120 servers and 30+ applications on Oracle DB in a phased manner
- Mass migration in 30 days with minimum downtime

Technology Stack

- AWS Virtual Private Cloud (VPC), Security Group, NACL
- AWS CloudTrail and AWS Config for AWS Environment build
- Amazon Elastic Compute Cloud (EC2)
- CloudEndure
- CloudFormation
- S3, Bamboo & Ansible

Result

- High availability of customer environment
- Completely automated leading to enhanced customer experience
- Quick disaster recovery and minimum downtime
- Enabled building new environments quickly
- Cost savings in migration, time and resource efficiency

Challenges faced by OneShield

The existing Data Centre was restricting OneShield's functions in several ways:

- Creating new customer environment was time consuming and difficult
- Minimal automation led to delays in delivery and execution
- Achieving high availability around whole environments was not easy
- Disaster recovery wasn't available within the environment
- Advanced monitoring and backup management was an uphill task
- Agility and scalability were getting affected

These restrictions were leading to problems with availability, agility, costs, resources and efficiency. OneShield at this point decided they needed to setup Disaster Recovery (DR) to achieve high availability, automation, self-service capabilities and minimum downtime. They wanted a solution that would make them more agile and scalable and enable them to manage more easily. They also wanted to move into the DevOps culture in the new environment.

The FSI software business had originally planned to setup the DR site with TCL as the primary location. They had to determine how to transform data from the hosting solution provider and successfully accomplish their goals.

OneShield decided to work with Umbrella to solve these challenges and help them achieve their objectives. They were seeking a partner with a wide range of skills in cloud migration, setting up DRs, DevOps and automation. AWS recommended Umbrella to OneShield as the right solution provider for their need. OneShield wanted a proof of concept to ensure that the migration would be completed successfully and that AWS was the right solution. To fulfill this need, Umbrella conducted a pilot that migrated one app and a few critical infrastructure servers to AWS very successfully and demonstrated how AWS would solve their problem.

Umbrella's Solution for OneShield

Umbrella listened to the challenges and needs that OneShield had. After conducting an analysis, Umbrella found that it would be cost and resource optimal for OneShield to migrate from the existing setup to Amazon Web Services (AWS). This would ease their cloud migration, bring them efficiency in monitoring and managing, establish application compatibility and help create new environments quickly.

Migration involved data from close to 120 servers and 30+ applications on Oracle Database. OneShield was stringent about mass migration in 30 days, and this was restricted to evenings and weekends.

Umbrella was able to help them achieve mass migration in 30 days with DR and high availability deployed and executed in the next 30 days. Umbrella's solution enabled OneShield to bring a much-improved customer experience in a cost effective manner.

AWS Virtual Private Cloud (VPC), Security Group, NACL, AWS CloudTrail and AWS Config have been implemented to secure the AWS Environment build using Amazon Elastic Compute Cloud (EC2) instances for application, database and supporting servers spanning two availability zones. To ensure smooth connectivity, site to site VPN connections from AWS to other OneShield locations were deployed. Server migration was made easy with CloudEndure, an AWS migration tool that enables live migration and ensured zero downtime. Infrastructure was deployed using CloudFormation and templates stored on S3; Bamboo was used for App release and deployment along with Ansible for configuration management.

Automated AMI backup and replication to another region for restoration and disaster recovery enabled effective functioning. Entire DR process for Infrastructure, Application, Network and DNS services were automated using AWS services and automation scripts. Constant monitoring was established by CloudWatch to track memory and disk utilization along with alerts configured for threshold breaches.

Result

- High availability of customer environment, completely automated leading to enhanced customer experience and performance
- Automation offered further benefits that ensure continuous adherence to defined process and compliance requirements
- Quick disaster recovery and minimum downtime
 - ➔ Smooth disaster recovery for Infrastructure, Application and Network environments without using any third-party expensive solutions
 - ➔ A few minutes to transition to another AWS availability zone or another AWS region for high availability or disaster recovery
- Empowered employees to build infrastructure within seconds and encouraged innovation
- Self-service model, highly agile and scalable, and easy to manage
- Ability to quickly resize systems for changing needs and easier adaptation to new changes
- Cost savings in migration, time and resource efficiency