Case Study

A ROADMAP TO RAPID CROSS-CLOUD APPLICATION MODERNIZATION

How to rapidly modernize for a multi-cloud future

softserve

This success story of product modernization was made possible by SoftServe's App Modernization Platform (SAMP). The situation might sound familiar — outdated systems, vendor lock-ins, and the pressing need for greater flexibility and scalability.

While we can't name our client or the exact product they modernized, we had to share this success story — and how it's done — so you can achieve similar results.

Our client is a major player — a global leader in networking equipment and IT infrastructure solutions. From networking and cybersecurity to AI solutions, this company pushes the envelope of innovation while supporting a multi-cloud strategy that integrates seamlessly with platforms like Azure, AWS, GCP, and Oracle, alongside hybrid solutions.

Now, onto the challenge: Our client needed to expand their market reach, and to achieve that, they had to make one of their critical digital security applications cloud-agnostic by extending it to Microsoft Azure within a strict three-month timeframe.

They needed their product to be cloud-agnostic and future-ready — all under a tight deadline.

This is where SAMP came into play. We transformed their application, eliminated vendor lock-ins, and enabled seamless multi-cloud capabilities — all within the demanding timeframe.

Imagine your product, your company — because this could be your success story too. Here's a step-by-step look at how it's done.

APPLICATION MODERNIZATION – A STEP-BY-STEP ROADMAP TO SUCCESS

Like many legacy applications, the product they needed to upgrade was originally built without modern architectural standards, relying heavily on AWS-specific services and lacking automated deployment processes. This made it difficult to adapt, scale, or move to other cloud environments — locking them into a single provider and slowing down their ability to innovate.

To break free from these constraints, we helped our client design an Azure Application Landing Zone. This automated the deployment of a multi-cloud infrastructure, allowing them to host their digital security solution wherever it made the most sense — not just in AWS.

The strategy was to modernize and replicate their applications to Azure Kubernetes Service (AKS), which would in turn increase efficiency, scalability, and reliability. Compliance was non-negotiable; we made sure they met stringent SOC 2 standards, safeguarding the integrity and security of their data.

Additionally, we streamlined their development processes with continuous integration and deployment automation tools. This made it easier for them to roll out updates quickly and consistently, helping them stay ahead of industry demands and deliver new features faster.

To meet the tight three-month deadline and achieve multi-cloud modernization, we used SAMP as an accelerator to build a secure and scalable solution. Here's a more detailed overview of how we tackled the challenge step by step:

1

Container Maturity Review:

We began by assessing the current state and readiness of the applications for migration and modernization through a Container Maturity Review.

2

Application Landing Zone Deployment:

We designed and deployed an Azure Application Landing Zone following industry best practices to ensure a robust, secure, and scalable foundation for hosting applications.

3

SAMP and AKS Integration:

SAMP, integrated with Azure Kubernetes Service, became the central component tailored to the client's needs. We onboarded all workloads, modernizing them with Azure SDK, and other cloud SDKs, creating an abstraction layer to eliminate vendor lock-ins, and introducing cross-cloud Helm charts.

4

Cloud-Agnostic Infrastructure:

SAMP's modular architecture allowed us to externalize and create cloud-agnostic infrastructure components. This included:

- Certificate and DNS Management with CertManager and ExternalDNS
- Monitoring with Prometheus and Grafana
- Secret Management using Secrets Store CSI Driver
- Federated Authentication with Microsoft Workload Identity

5

Vendor Lock-In Externalization:

Major vendor lock-ins like Kafka and Elasticsearch were externalized and deployed as cloud-native services using Confluent Cloud and Elastic Cloud, ensuring flexibility and scalability across environments.

6

Cloud Service Integration and Security:

The platform integrated seamlessly with AWS and other cloud services, enabling private connectivity and data encryption in transit and at rest. We deployed an Azure Cloud Governance accelerator and configured SOC 2 and CIS Microsoft Azure Benchmark standards in audit mode to maintain security and compliance.

7

CI/CD Integration and Automation:

SAMP's design enabled seamless integration into the existing CI/CD pipeline using Enterprise GitHub. We deployed self-hosted runners within a virtual network, automating multi-cloud infrastructure provisioning with Terraform and deploying workloads with Helm Charts. By leveraging infrastructure as code (IaC) with Terraform, we:

- Ensured consistent and reliable cloud resource management
- Enhanced scalability and repeatability
- Improved operational efficiency across multiple cloud platforms

The end result? A fully modernized, cloud-agnostic application that meets regulatory compliance and positions the client for expanded market reach — all delivered within the tight three-month timeframe.

In the end, the modernization and migration efforts were a game changer.

Thanks to the automated deployment design of SAMP:

- Tasks that once took months now take days, drastically slashing time-to-market for new services and features.
- The use of IaC with Terraform made the process more efficient, fully automated, and ready for multi-cloud deployments.
- Breaking free from the vendor lock-in and externalizing key components like Kafka and Elasticsearch enabled the adoption of new clouds, opening doors for business growth and greater flexibility.
- Strong governance measures were integrated to meet stringent security and compliance standards, ensuring that all traffic within the virtual network remained secure, with data encrypted both at rest and in transit.

Our client hit the market with their modernized application on time as planned, without missing a beat.

This isn't just about modernization — it's about setting the stage for future growth and agility. If this sounds like the kind of success your organization needs, SoftServe's SAMP might be the key to making it happen.

About SoftServe

SoftServe is a premier IT consulting and digital services provider. We expand the horizon of new technologies to solve today's complex business challenges and achieve meaningful outcomes for our clients. Our boundless curiosity drives us to explore and reimagine the art of the possible. Clients confidently rely on SoftServe to architect and execute mature and innovative capabilities, such as digital engineering, data and analytics, cloud, and AI/ML.

Our global reputation is gained from more than 30 years of experience delivering superior digital solutions at exceptional speed by top-tier engineering talent to enterprise industries, including high tech, financial services, healthcare, life sciences, retail, energy, and manufacturing.

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