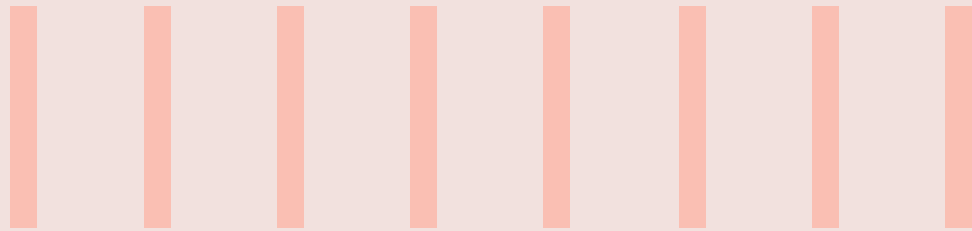




# MULTI-CLOUD SRE MANAGED PLATFORM SAVES EFFORT, INCREASES STABILITY FOR A GLOBAL MAJOR ACCOUNTING FIRM



## The Client

The client is a major accounting firm operating across 157 countries with a gross revenue of US \$43 billion. They provide a network of services to more than 85% of the global Fortune 500 companies and over 100,000 entrepreneurial and private businesses.

## Drivers for SRE Adoption

The client's requirement for an SRE platform was the result of multiple issues with their current deployment. The portal was built on Windows Azure Pack (WAP) that supported automation for provisioning various Azure cloud resources. Security checks were performed after development and there was no formal operations approach to reduce turnaround time or cost. Meanwhile, Microsoft started deprecating some of the underlying technologies. Therefore, it was necessary to decommission the current cloud portal while maintaining security and compliance, restructuring operations, and improving user experience. These factors accelerated the client's need to move to a next-generation multi-cloud platform with SRE managed operations.

## The Infosys Solution

Infosys used a combination of cloud platform engineering and SRE to help the client achieve the desired business outcomes using a multi-cloud supported, catalogue-based, guided self-service portal. The portal provides a unified set of cloud agnostic tools for standardization of the image repository, provisioning, orchestration, container management, container security, and secret management.

The unified cloud solution comprises:

- Azure and AWS cloud foundations with multiple region support
- Cloud orchestration suite with guided self-service for provisioning and lifecycle actions
- Cloud advisory services and managed support for operating units

## Overview

Infosys partnered with the client to build a multi-cloud self-service portal. The automated platform was based on advanced market-leading technologies to deliver an elevated customer experience, robust security, and better compliance. The portal was built using microservices architecture with agile and DevOps practices and methodologies.

Operating in a multi-cloud landscape, the platform adopted a service-centric view with 'Site Reliability Engineering' principles at the core. This included:

- Defining metrics to measure the level of service from the customer's perspective
- Observing and correlating data to identify leading trends
- Predicting potential impact on services
- Identifying anomalies and fixing them with automated solution

## Challenges with Existing Infrastructure

The client was facing several challenges that necessitated the migration to a managed SRE platform. These included:

- Operational risks due to inconsistent data center and cloud usage
- Lack of cloud-agnostic platform to set up a cloud foundation and tools for security, compliance, and lifecycle management
- Business risk due to improper security implementation
- Inability to respond to changing market demands
- Increased costs due to existing infrastructure and cloud

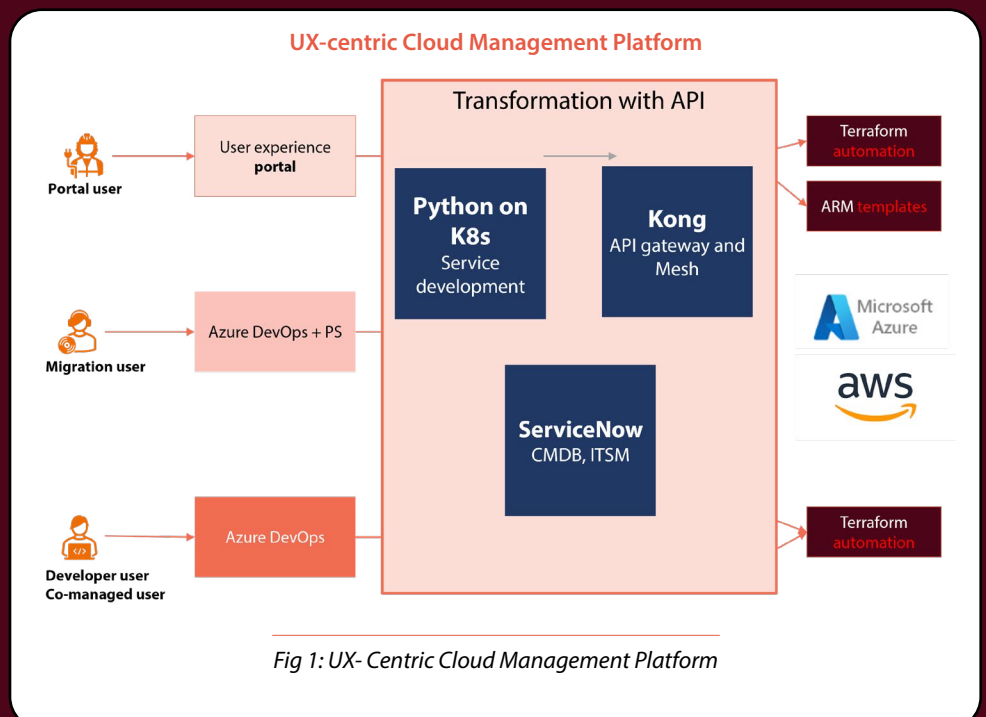


Fig 1: UX- Centric Cloud Management Platform

## Solution Highlights

The multi-cloud SRE platform solution implemented by Infosys provided the following advantages:

- Reduced toil (reduce people time on support work & have more time on engineering improvements) with one-click automation
- Introduced code/self-healing to mitigate microservice failures which is the core component of the service provided to the customers
- Improved availability with node autoscaling, uptime SLA, and noise suppression
- Provided Azure resource quota alerts on role assignments and SQL PaaS instances to avoid SNOW automation failures
- Enabled alerts for pod restarts and cluster diagnostics events for better insights, faster troubleshooting, and easy maintenance of clusters running mission-critical workloads
- Implemented alerts for PostgreSQL critical metrics such as CPU utilization to avoid potential P2 issues
- Introduced dashboard for the top microservices and microservices with maximum error rate for prioritized and focused SRE efforts. Enabled tracing and drill-down to the specific issue
- Automated subscription onboarding and user addition in Prisma with self-serve forms

### Tool Stack Across the Lifecycle

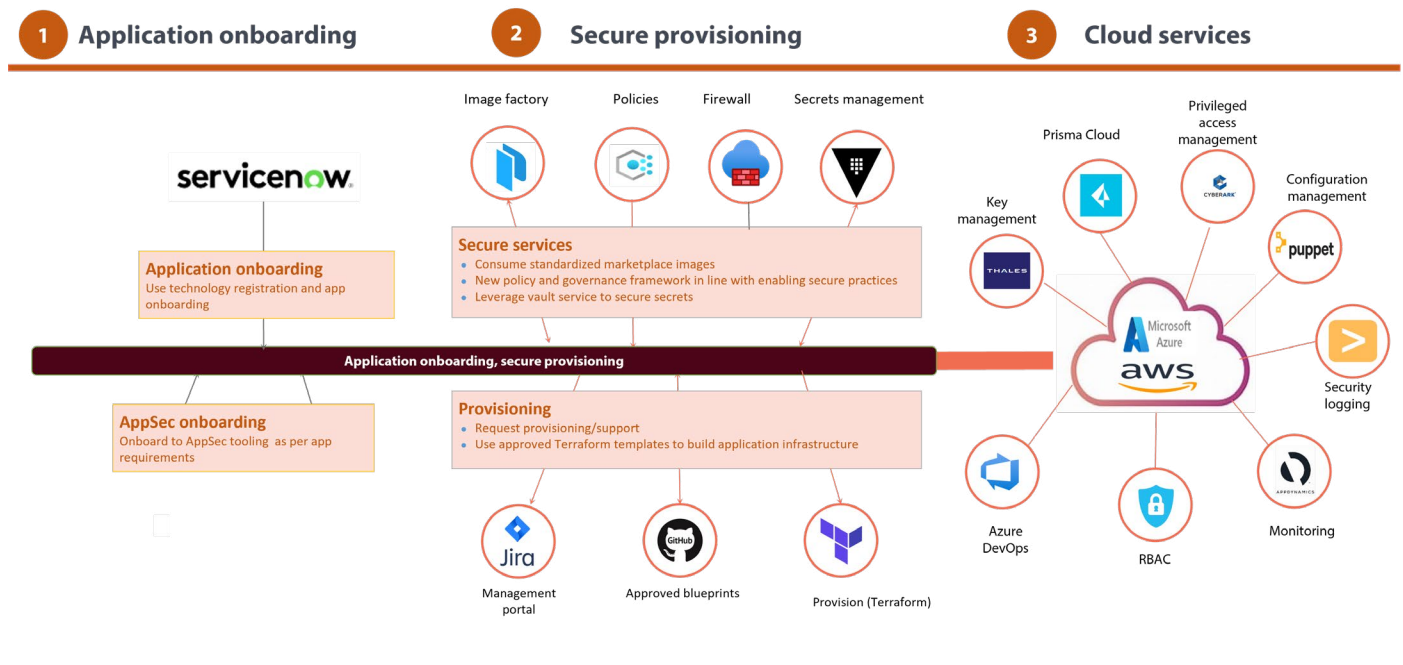


Fig 2: Tool Stack Across the Lifecycle



## Benefits

The solution implemented by Infosys has delivered the following benefits to the client:

- System availability improved by **50** basis points
- Error rate reduced by more than **50%** for key microservices
- Higher platform stability and increased platform adoption (from

### 100 to over 3000 applications)

- **1483** failures permanently mitigated with remediation as part of code/self-healing approach
- MTTR (Mean Time to Resolve using Prisma tool onboarding reduced from **24 hours to 2 hours**
- Effort saving of **10** hours per deployment with serverless Azure function approach

## Client Testimonial

*"Infosys' SRE work thus far and the reporting progress towards how we have and how we will remove toil has been fantastic. In the last report summary, demonstration of how we have improved operations by reducing/removing the toil has been awesome."*

Client,

Senior Director, Cloud and Infrastructure Operations

*"We have collectively come a long way in under a year to drive our operational remit for cloud operations. All the effort, the long hours, the countless conversations, and ongoing learning, every one of you deserve the credit for making sure we produce a valuable customer experience. A special thank you to continue to strive for world-class operations!!"*

Client,

Senior Director, Cloud and Infrastructure Operations

To know more about how your enterprise can gain a competitive edge with Infosys Enterprise Agile DevOps or with a custom platform of your own, please write to us at [agile\\_devops@infosys.com](mailto:agile_devops@infosys.com).

For more information, contact [askus@infosys.com](mailto:askus@infosys.com)

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