RCATSONE MODERNIZES KEY APPLICATION USING CLOUD-NATIVE TECHNOLOGY WITH RANDOLI

Region
North America

Industry
Telecom

Headquarters
Mississauga,
Ontario, Canada

Company Size

Technologies

- Apache Camel

- Springboot

- Ansible

- Jenkins

-Elasticsearch

Our product, Randoli App Director, helps define, manage & scale your apps on multiple Kubernetes clusters with ease

Executive Summary

RCATSONE is a leading provider of end-to-end monitoring and test equipment, software and real-time analytics to the global telecommunications industry.

Randoli was instrumental in modernizing our QoSExecutive software towards becoming cloud-native. They provided the depth of knowledge in modern application development on the Red Hat platform we needed. Coupled with an expedient understanding of our functional requirements, they helped us to get to market within a short timeline.

- Rick Sawicki
  COO, RCATSONE

Key Objectives

The engagement had the following key objectives

- Cloud-Native to ensure the solution is cloud ready as part of the overall organization strategy.

- Migrate from windows services to Microservices using Springboot

- CI/CD pipelines for faster feedback & rapid delivery of business functionality.

Solution

Randoli Inc provided thought leadership & software delivery services to help transform the existing services to Microservices based on Camel/Springboot with CI/CD pipelines powered by Jenkins & Ansible with distributed logging via Elasticsearch.

Benefits

- Increased developer efficiency & accelerated development due to Camel & CI/CD pipelines allowing quicker time to market.

- Cost savings on licensing & improved scalability with less resources.

- Microservices model allowed each key component of the system to evolve, manage & scale independently.

- Cloud ready - to maximize the efficiencies & benefits of cloud computing and rapid delivery to support growing customer demands.

Approach: Cloud-Native & Test-Driven-Development

Cloud-Native was a key objective. The new Microservices were implemented with *Camel/Springboot* to ensure the services are lightweight and can be easily containerized. The services had a myriad of configuration options to allow easy customization which was easily implemented via Springboots rich configuration model.

The QoSExecutor service relies on complex orchestration of connectivity to various probes & data flows along with complex SQL queries & calculations to support it's real-time network-wide performance and availability information. We used *Apache Camel's* built in support for transports to handle the connectivity to various probes in parallel and the enterprise-integration-pattern components to manage the orchestration to ensure the information is retrieved and processed efficiently with minimal latency.

Test Driven Development approach was followed to ensure faster feedback loop on various adjustments we had to make during the testing phase allowing the team to provide faster resolution time for defects.

Automation using Jenkins and Ansible playbooks allowed for rapid deployment across multiple environments from dev to QA to the customers UAT environment. This coupled with automated testing as described above, allowed the team to deploy code rapidly with a higher degree of confidence and was instrumental in delivering the solution on-time and on-budget.

Results

Despite the tight timeline to support the business objectives, Randoli was able to deliver the project on-time & on-budget.

The following results were notable

- Increased developer efficiency & accelerated development with Camel components allowing quicker time to market.

- Automated testing with CI/CD pipelines allowed rapid delivery of business functionality during the projects and for future enhancements.

- Cost savings on licensing & improved scalability with less resources.

- Microservices model allowed each key component of the system to evolve, manage & scale independently.

- Cloud ready - to maximize the efficiencies & benefits of cloud computing and rapid delivery & scalability to support growing customer demands.

About Randoli

Randoli is a product and services company that enables accelerated and cost-efficient cloud migrations & app modernizations. Our product, Randoli App Director, helps define, manage & scale your apps on multiple Kubernetes clusters with ease.

Our service offering comprises end-to-end cloud migration & app modernization delivery and consulting. We collaborate with our customers to decide the best way to leverage Randoli's offering to realize any cloud migration & app modernization vision. Our team of open-source experts, flexible engagement models, and partnership approach is a testament to our success with global clients.