

Business Domain
Transportation and Logistics

Project Type
AWS Solutions

Enhancing IoT Asset Tracking Through Strategic AWS Migration

Client

A startup company that offers IoT solutions for tracking and securing assets, primarily serving sectors like logistics, manufacturing, and transportation.

Project

The platform helps clients prevent theft, optimize inventory management, and improve operational efficiency by leveraging technologies such as geofencing and automated notifications. To address performance gaps and maintain uninterrupted business operations, it underwent a seamless migration to a modern, scalable infrastructure, ensuring optimal functionality and long-term reliability.

Objective

Following AWS's deprecation of the OpsWorks service, the customer sought to migrate their existing platform to AWS Systems Manager Application Manager. The goal was to ensure continuity, maintain operational efficiency, and enhance application management capabilities while taking advantage of the updated features provided by Systems Manager.

Team Reinforcement

The client sought expertise to ensure a seamless migration from AWS OpsWorks to AWS Systems Manager Application Manager. They needed an end-to-end solution to tackle complex challenges, including replicating application configurations, recreating automation workflows, and enforcing compliance. Intetics assembled a specialized team with deep domain knowledge to deliver the project. Through this expertise-driven approach, the client successfully achieved their migration goals, laying the groundwork for future scalability and operational excellence.

Challenge

The Client faced a critical challenge following AWS's deprecation of the OpsWorks service, which had been integral to managing their applications. They needed to ensure seamless continuity during the migration to AWS Systems Manager Application Manager while improving the management and automation of complex workflows. Additionally, their operational team required training to adapt to the new platform's tools and features, ensuring they could effectively manage applications post-migration and maintain operational efficiency.

With the deprecation of OpsWorks, the migration had to be seamless to prevent downtime or configuration loss, particularly for applications with complex dependencies and configurations.

As the new environment introduced additional capabilities, it was essential to ensure that all migrated applications adhered to AWS security best practices.

Quick Facts

- ✓ Improved application management through centralized monitoring and automation, reducing manual intervention **by 35%**
- ✓ Seamless migration without any disruptions to business operations
- ✓ 2 months from assessment to implementation

Technologies

Java / Spring / MySQL / ElasticSearch / Redis / AWS Io / AWS services

Solution

★ 01

Conducted a comprehensive assessment of the OpsWorks configurations and dependencies to create a tailored migration plan. This process involved mapping all application configurations, scripts, and automated workflows that would need to be replicated in Systems Manager.

★ 04

With the Systems Manager's centralized dashboard, we provided the customer with a unified view of their application performance, status, and compliance. This allowed operators to monitor applications more effectively and in real time.

★ 02

Using AWS Systems Manager Application Manager, we recreated all application configurations and workflows, utilizing Automation, State Manager, and Patch Manager to match the functionality previously managed by OpsWorks.

★ 05

Leveraging Systems Manager Compliance and Patch Manager, we implemented enhanced security protocols, enabling the customer to automate compliance checks, patch management, and secure configurations across all applications.

★ 03

We configured Systems Manager Automation to handle routine maintenance tasks, such as backups, patching, and updates, minimizing manual intervention and reducing the risk of human error.



Benefits and Results

- ★ Centralized management and automation features in Systems Manager enabled the team to monitor, configure, and update applications more efficiently.
- ★ The well-planned migration strategy enabled a smooth transition from OpsWorks to Systems Manager without any application downtime or disruption to end-users.
- ★ The systems manager's built-in security features provided better compliance monitoring and automated patch management, strengthening the security posture of the customers' applications.
- ★ By automating routine maintenance tasks, the solution reduced manual interventions, freeing up resources for other business-critical tasks.

Techstack:

Java, Spring, MySQL, ElasticSearch,
Redis, AWS IoT, and more AWS services

Team: 4

Project Manager,
AWS Migration Specialist,
DevOps Engineer,
Systems Manager Engineer