INGRAM MICRO CLOUD Microsoft

Canadian Online Automobile Retailer Partners with Ingram Micro Cloud to Modernize Infrastructure

INDUSTRY
Automobile Retail

LOCATION
Ottawa, Canada

EMPLOYEES
250+

OPERATING SYSTEM
Red Hat Enterprise Linux

DATABASE
MySQL

AZURE NATIVE TOOLS
Azure Migrate
Azure Database Migration Service (DMS) Azure Database Service forMySQL
Azure Virtual Machines
Azure Scale Sets
Azure Network Security Group
Azure VPN Gateway

THIRD-PARTY TOOLS
Corent SurPaaS

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A prominent online automobile retailer of new and used vehicles based in Ottawa, Canada was looking for a more cost-effective infrastructure solution. The company wanted to refresh its environment and move its database to the cloud.

The retailer was using Red Hat Enterprise Linux running a MySQL database with a Java Spring Boot application on the backend and a Vue.js on the frontend. This supported its CMS, CRM, billing systems as well as its customer-facing, car-buying marketplace, which services a dealer network numbering 800 strong.

The Challenge

It had been three years since the retailer last updated its environment. The company was concerned its software and infrastructure was outdated and at risk of security breaches. The retailer also wanted to scale globally, but its environment prevented the company from accomplishing this goal.

In addition to these concerns, the company faced resource challenges. The car market in Canada typically peaks in sales per unit during the spring and summer months, declining in the fall and winter months. In fact, they typically see a 35% decrease in sales per unit from May to December.

The environment did not have the capability to scale up and down as needed to cope with this fluctuation in the market, and 30% of its resources were underutilized. As a result, the retailer was overpaying and unnecessarily bleeding valuable capital.

Due to these growing concerns, the company decided to enter into a refresh cycle and at the same time wanted to take this opportunity to modernize its infrastructure.

The Solution

The retailer needed to cut operational costs by acquiring a more scalable environment. To solve this problem, Ingram Micro Cloud recommended migrating its 119 workloads to Azure and use VM scale sets to automate the scaling of its infrastructure. Through this migration, the company's environment would also get a complete security overhaul.

The Steps

Ingram Micro Cloud conducted a data center assessment to help the customer better understand its server infrastructure. Based on the infrastructure assessment, Ingram Micro Cloud recommended to re-architect the server infrastructure and modernize the database server using Microsoft Azure's database as a service for open source databases.

A migration was scheduled to take place once Ingram Micro Cloud's experts had defined the solution architecture on Microsoft Azure, which was a mix of compute and PaaS services. The migration itself involved taking the retailer's existing environment and putting it into three destination subscriptions for Dev, QA and production.

The MySQL database was modernized with Azure Database for MySQL with a read replica to support the reporting needs of the business. To optimize the capacity of its environment, Ingram Micro Cloud's migration experts used VM scale sets as well as availability sets for failover and high availability.

The Results

With the migration, Ingram Micro Cloud minimized the servers running on-premises for the application backend and frontend nodes by 40%. In addition, Ingram Micro Cloud accomplished the following outcomes in 45 days:

Avoided downtime: One of the retailer's fears about migrating was possible downtime during the transition period. As part of Ingram Micro Cloud's IaaS Professional Services, engineers provided a Proof of Concept to mitigate risks. As a result, Ingram delivered a seamless cutover of its production systems, ensuring the company could continue operating business as normal.

Resource savings: The retailer's stack encompassed eight web servers, six applications servers and one database. Ingram Micro Cloud's experts put the web servers and application servers in a steady stasis of four with reserved instances. This meant they had no more wastage and would always have the correct amount of capacity needed at any given time. The company was also able to reap the cost benefits of a scalable environment and expand its operations globally with offices in the United Kingdom and India.