

Royal Caribbean Delivers a Real-Time Personalized Guest Experience

Consumers are constantly tethered to their smartphones and they expect companies to provide highly personalized experiences in real time. As a result, businesses are looking to find ways to accommodate these customer preferences by providing easy access to information and services.

That was the situation facing Royal Caribbean Group, the widely known cruise vacation company that controls and operates four global brands: Royal Caribbean International, Celebrity Cruises, Azamara Club Cruises, and Silversea Cruises.

Known for driving innovation at sea and keeping a step ahead of competitors, Royal Caribbean has embraced digital transformation internally and externally. Having already unveiled a predictive route-optimization system to assist with navigation, Royal Caribbean set its sights on transforming the guest and crew experience.

Royal Caribbean's vision was to make information and services available in real-time on mobile devices to reduce travel friction and frustrations and allow more time for adventure and exploration.

Enhancing the Guest Experience at the Edge

Royal Caribbean had spent more than \$1 million in printing costs across its fleet to inform guests of daily ship activities and offerings. If guests wanted to book an activity or add a special food and beverage package listed in a brochure, they had to stand in line and see an on-board concierge to make that change.

By the time they got to the front of the line, there was no guarantee the additional services they wanted would be available. Few vacationers like spending their time this way, and the cruise line risked lost revenue from dissatisfied customers. Complicating matters was the need to accommodate guests on shore and ship.

Royal Caribbean sought to enhance its guests' mobile experience to improve the quality of service that guests received.

Industry

Travel and leisure

Location

United States

Website

www.royalcaribbeangroup.com

Products

Nutanix Kubernetes Platform

Key Benefits

- Improved the guest experience by making services discovery and transaction processing quick and easy.
- Standardized the ship-to-shore system footprint to enhance operational support.
- Expanded service capabilities while optimizing resources on-premises and in AWS.

“The first ship we launched in July 2006 just had a guest mobile app that showed you information about what activities were happening that day,” said Gary Gleckner, technical project manager at Royal Caribbean Group. “Our website had a lot of information on it, but you couldn’t see if there was a spa appointment available at 2 p.m. on Tuesday.”

Besides making additional services easier to purchase, Royal Caribbean sought to improve its guests’ onboarding experience.

“When you get on the ship, there’s all of this stuff you’re seeing for the first time, and you have to go through several exercises, like how to put on a life jacket,” added Joel Guilarte, product owner and technical lead for the platform team at Royal Caribbean Group. “We wanted people to get that first day back by accelerating how quickly you get on the ship, learn some of the safety information, and see the type of activities that you can do.”

To enable modern mobile experiences for passengers, the cruise line needed a way to handle mobile traffic and extract data from its legacy systems – without a complete rip and replace. In addition, data needed to be orchestrated across land and sea, which is no small feat.

Any downtime to accommodate an upgrade could delay voyages and be costly. The cruise line needed an easy-to-use solution that made it possible to deploy the same code on ship and onshore to provide the same experience for all users.

“We had a system that handled dining reservations, a system that handled checking in and swiping your credit card for your charges, but we didn’t have a way to tie that all together so that we could present it in a really cool digital way,” Gleckner explained.

Customer Satisfaction and New Revenue Streams

Royal Caribbean ultimately chose Nutanix Kubernetes Platform (NKP) to deliver a reliable, easy to manage platform to modernize its infrastructure and enable digital transformation at scale. With NKP as the backbone and service layer, any new application or service could be deployed quickly, simply and efficiently across its fleet of ships.

The cruise line was able to deploy a suite of mobile edge/IoT applications on its ships to improve the on-boarding experience for passengers and unlock new revenue streams. The Royal Caribbean mobile app delivers timely, in-context offers to a new generation of guests who expect to be able to check on-board activities, make restaurant and event reservations, and complete purchases from their mobile devices.

By reducing the overhead associated with its legacy systems and replacing key components with elastically scalable and resilient hybrid cloud infrastructure from Nutanix, the global cruise line has been able to continue its investment in innovation.

“Before Nutanix, you couldn’t see what activities were available on your specific ship. Now you can see that information months in advance with some of the tools that we’ve provided.”

Gary Gleckner
Technical Project Manager,
Royal Caribbean Group

Expanding Capabilities from Ship to Shore

Since first using Mesosphere DC/OS, Royal Caribbean has migrated to the Nutanix Kubernetes Platform (NKP) to expand its capabilities and optimize resources on-premise and in AWS. Today the cruise line is running more than 200 microservices on each ship to support the many different functions through which the mobile application enables guests to interact.

“We’ve added facial recognition to our mobile app so you can automatically check in without ever showing a boarding pass,” added Gleckner. “We also have kiosks to book shore excursions. And there are a number of back-end things that we’ve added, such as alerting the stateroom attendants when you are off the ship so they can clean your room. NKP has been the backbone of all of these features.”

Adapting with Agility

In addition to simplifying provisioning, operations and lifecycle management for Kubernetes, Nutanix enabled Royal Caribbean to adapt quickly to unexpected changes brought on by the COVID-19 pandemic.

“We built a lot of different technologies on top of our current platform in a short amount of time to fall in line with the CDC requirements,” Guilarte explained. “We had simulation voyages that would tell us whether guests were fully vaccinated or not, or if a guest tested positive so that we could track them down and quarantine them. We’re constantly adjusting things based on the guidance that keeps on coming. NKP has really helped us solve all of these problems.”

NKP enables organizations to easily accommodate the continual innovation that arises within the open-source community. As the technology landscape continues to advance, Royal Caribbean feels secure in its ability to re-imagine the cruise industry and improve the guest experience through NKP.

Take the Nutanix Kubernetes Platform for a [free test drive](#).
No software downloads. No configurations. Just login and launch.



NUTANIX

info@nutanix.com | www.nutanix.com | [@nutanix](https://twitter.com/nutanix)

©2025 Nutanix, Inc. All rights reserved. Nutanix, the Nutanix logo and all product and service names mentioned herein are registered trademarks or trademarks of Nutanix, Inc. in the United States and other countries. All other brand names mentioned herein are for identification purposes only and may be the trademarks of their respective holder(s). CaseStudies-RoyalCaribbean-v1 07172025

