

AVIATION I.T. GROUP SIMPLIFIES INTEGRATION OF AIR TRAVEL APIS WITH RED HAT

SOFTWARE

Red Hat® 3scale
API Management

Red Hat Customer
Success program

PARTNER

NGINX

A non-profit aviation group that provides IT and communication technology solutions connects various applications and platforms used by members and customers through application programming interfaces (APIs). However, as the number of APIs grew, management and integration became more costly and time-consuming. To simplify API management and improve visibility, the group deployed Red Hat 3scale API Management. By better connecting various APIs and systems, the group decreased partner on-boarding time by 83%, improved operating costs to support smaller business partners, and created a foundation for new, innovative passenger experiences.



AVIATION IT AND COMMUNICATIONS

4,700 EMPLOYEES IN
200 COUNTRIES

"On-boarding new users was a complex, costly process, but with Red Hat 3scale API Management, the process is far quicker. These improvements make business easier for everyone and helps us attract new partners."

PRODUCT MANAGER,
AVIATION I.T. GROUP

BENEFITS

- Reduced customer on-boarding time by 83% with faster integration and unified management interfaces
- Reduced operational costs of services to attract new and smaller aviation customers
- Gained access to expert support and proactive issue resolution through the Red Hat Customer Success program



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IMPROVING API MANAGEMENT TO SIMPLIFY EXPANSION

A non-profit group of major airports and airlines from around the world provides IT and telecommunications services to 90% of the world's airlines. As a result, almost every passenger flight relies on its technology. The group also provides border management solutions to more than 40 governments worldwide. Working with air transport owners and members, it strives to create a positive impact through innovative solutions, such as a global communications platform for the air transport market.

As an international organization, the group maintains a variety of technology platforms, many of which have been in place for several years. To help these platforms interact more effectively and bring IT up to the speed of business, the group began using application programming interfaces (APIs). For example, a key API related to ticket handling is used to process five million transactions per day.

However, the group's IT management processes for these APIs were costly, delayed time to market, and introduced the potential for human error.

"To support our APIs, we needed more robust management tools," said a product manager at the aviation IT group. "Access and business rules were all hard coded into the software. Managing each API was a time-consuming process that required a dedicated team."

To support more unified, flexible, and digital-focused IT without disrupting existing, critical infrastructure, the group sought a solution to efficiently manage its growing number of APIs across multiple IT environments and teams. This initiative included goals of creating a streamlined passenger experience—from travel planning and booking, to security, baggage, connectivity, and other airport and in-flight operations. In addition, the group sought to create a dynamic, interactive environment for engaging with the developer community for generating new, innovative solutions.

ESTABLISHING A MANAGED API PLATFORM

Many of the aviation IT group's APIs use Simple Object Access Protocol (SOAP), but few vendors offer ready-to-use SOAP solutions or API customization. After evaluating solutions from leading vendors, the group decided to deploy Red Hat 3Scale API Management to gain necessary SOAP-related features and support.

Red Hat 3Scale API Management helps the group deliver centralized API management features—such as access control, rate limits, payment gateway integration, and developer experience tools—through a distributed, cloud-hosted environment. In addition, the Red Hat platform provides a standardized, identical API interface across environments. The group also implemented NGINX, an open source web server from a Red Hat partner, as a support gateway and load balancer to ensure optimal performance.

With help from Red Hat, the group deployed Red Hat 3Scale API Management as a managed platform in three months. The platform was used to integrate payment and invoicing capabilities, providing more meaningful information to passengers to improve their travel experiences. For example, one key API is related to ticket handling and processes five million transactions per day. The interface of Red Hat 3Scale Management ensures consistency for this and other API interfaces across multiple platforms to help the group lower costs and simplify customer management.

"This deployment required significant work, but it was quickly completed to high standards by Red Hat with full integration into our existing systems," said the product manager.

TRANSFORMING BUSINESS CAPABILITIES WITH APIS

FASTER, MORE EFFECTIVE INTEGRATION

The aviation IT group gives partners direct access to its datacenter to on-board new customers, a capability that requires the group to establish separate partitioning, public key infrastructure (PKI) keys, and security certificates. Previously, this on-boarding process could take up to 12 weeks. With Red Hat 3scale API Management, this process now takes just two weeks—an 83% improvement.

In addition, using Red Hat's management platform has simplified performance monitoring and management across the group's partner ecosystem by unifying various platforms under a single, standardized interface.

"On-boarding new users was a complex, costly process, but with Red Hat 3scale API Management, the process is far quicker," said the product manager. "These improvements make business easier for everyone and helps us attract new partners. We can also support SOAP out of the box, as well as the customization for further SOAP development, which our industry still heavily relies on."

With its new API management capabilities, the group is also helping users and partners streamline their own customer experience. These companies can provide real-time flight information for better visibility into global travel statuses, making flight search and purchase experiences easier.

"We can display wait times at key areas, such as baggage carousels. For example, each of Heathrow Airport's Terminal 5 security entrances can use our APIs to display accurate waiting times," said the product manager. "Our APIs also support 3D barcodes for mobile boarding passes to speed the flight boarding process."

IMPROVED COSTS

By implementing Red Hat 3scale API Management to support a digital-focused IT strategy, the aviation IT group has significantly decreased the cost to add and orient customers. By integrating customers' disparate systems via a single, standardized management interface, the group has also reduced related management costs.

"A digital-focused strategy reduces the burden on our IT team, which in turn greatly reduces cost-related barriers to becoming our partner," said the product manager. "We can now offer our services as a fully-supported solution to airlines and airports, particularly smaller ones that previously couldn't afford such technology."

ENHANCED SUPPORT AND ISSUE RESOLUTION

With Red Hat 3scale API Management and NGINX, the aviation IT group can proactively monitor and resolve any potential issues.

"Support has become much more straightforward. In the past, we waited and reacted, but we can now identify issues before our partners do and triage issues as they happen," said the product manager. "We log every type of access to see how our customers are using our systems, so we can ensure the right people have access to the right data at the right time."

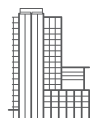
CUSTOMER CASE STUDY Aviation IT group simplifies integration of air travel APIs with Red Hat

To further improve troubleshooting and performance, the group is part of the Red Hat Customer Success program. Every month, Red Hat contacts the group's teams to proactively determine any necessary changes and answer related questions. This proactive engagement, as well as timely delivery of tailored resources, has helped the group meet business goals faster by taking full advantage of the capabilities of its Red Hat API environment.

COLLABORATING TO BUILD A DIGITAL-FOCUSED FUTURE

With its successful implementation of Red Hat 3scale API Management to manage its rapidly growing API environment, the aviation IT group plans to extend its use of Red Hat technology. The group recently deployed Red Hat Enterprise Linux® at its three global datacenters and expects to add more Red Hat solutions in the future.

"We are at the start of a digital transformation within our organization and the wider aviation industry," said the product manager. "We're looking forward to furthering our relationship with Red Hat as our journey continues."

ABOUT RED HAT

Red Hat is the world's leading provider of open source software solutions, using a community-powered approach to provide reliable and high-performing cloud, Linux, middleware, storage, and virtualization technologies. Red Hat also offers award-winning support, training, and consulting services. As a connective hub in a global network of enterprises, partners, and open source communities, Red Hat helps create relevant, innovative technologies that liberate resources for growth and prepare customers for the future of IT.



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