Audi accelerates innovative development

Audi AG, part of the Volkswagen (VW) Group, needed to create a stable, scalable environment for innovative development across cloud platforms. Audi decided to use Red Hat OpenShift, an enterprise Kubernetes platform, as the foundation of Kubika-O, its new security-focused runtime environment. Now, the company’s developers can provision new project environments faster to build, deliver, and scale diagnostics, data management, and other innovative projects across its Amazon Web Services (AWS) cloud environment. Kubika-O is also used as cross-platform delivery center for container image and container runtime security for various platforms in the VW Group.

**Benefits**
- Reduced project time to market by up to six months
- Created consistent, managed multitenant platform across cloud vendors
- Enabling the benefits of cloud-native services and the benefits of DevSecOps across silos

"Red Hat OpenShift helped us create a secure runtime for our projects and containers with low dependencies."

Sebastian Kister
Product Team Lead, Kubernetes Competence Center, Audi AG

---

**Software**
Red Hat® OpenShift®
Dedicated on AWS

**Partners**
Amazon Web Services (AWS)

---

**Headquarters**
Ingolstadt, Bavaria, Germany

**Automotive**
More than 87,000 employees worldwide
Supporting innovation in an environment of constant change

Audi AG, part of the Volkswagen (VG) Group, is a manufacturer of high-quality automobiles. The company delivered more than 1.6 million cars to 100 countries worldwide in 2020.

To keep pace with evolving business demand and fulfill its mission of leading through technology, the VW Group tasked Audi’s IT team with creating a secure, stable, central environment for innovative development at scale across the group’s many brands. As part of this project, Audi IT sought to reduce risks and remove dependencies with a flexible, modular architecture that could support iterative work.

“The days of ‘plan, build, run’ are over,” said Sebastian Kister, Product Team Lead, Kubernetes Competence Center, Audi AG. “You can’t expect a system to run as-is for ten years anymore. To survive in an environment of constant change, we needed a multitenant system with the ability to make small adjustments and updates whenever necessary.”

Adopting Kubernetes with a fully managed platform

Audi decided to work with Red Hat to create a new as-a-Service development environment, called Kubika-O, based on enterprise open source technology. The company chose Red Hat software because it met their strategic goals to take advantage of open source flexibility and scalability while avoiding vendor lock-in.

The software foundation of Kubika-O is Red Hat OpenShift, an enterprise Kubernetes platform for building, automating, scaling, and managing container-based applications. To integrate with its cloud provider, Audi uses Red Hat OpenShift Dedicated on AWS, a managed and supported solution offered natively on Amazon Web Services (AWS) for easier management and billing.

Delivering applications faster with stable, cross-cloud foundation

Reduced time to market

Previously, projects became backlogged due to time-consuming provisioning processes that could require lead times as long as six months. With automation through Red Hat OpenShift, Audi IT can quickly provide tailored Kubernetes clusters and add-ons for each Kubika-O project. As a result, experienced developers and those new to Kubernetes can work more efficiently to create, deliver, and migrate innovative solutions across on-premise and cloud environments.

Created multicloud foundation for innovative new services

Kubika-O supplies Audi’s platforms, applications, and projects with a consistent foundation. This multitenant Kubernetes environment supports several key operational applications, including Audi Open Source Diagnostics, Group Measurement Data Management, and its many internal development and management applications to drive the digital transformation of Audi Group. “Red Hat OpenShift helped us create a secure runtime for our projects and containers with low dependencies,” said Kister.

Improved responsiveness to meet demand

Audi’s teams can now use the modular, responsive container infrastructure and robust automation technology included in Red Hat OpenShift to scale applications using shared resources—without relying on physical infrastructure.
About Audi AG

The Audi Group, with its brands Audi, Ducati, and Lamborghini, is one of the most successful manufacturers of automobiles and motorcycles in the premium segment. It is present in more than 100 markets worldwide and products at 19 locations in 12 countries.