APIS IT modernizes with Croatia and Adriatic Region’s first Red Hat OpenShift implementation

APIS IT provides strategic IT services to ministries, public administration bodies, and utilities providers across the Republic of Croatia, specifically in the city of Zagreb. To improve its agility and simplify a complex IT environment, APIS IT decided to migrate two decades of legacy systems to a single, standardized environment built on Red Hat OpenShift. With this environment and a collaborative DevOps approach, APIS IT’s teams can work more efficiently and consistently to develop and deploy new service applications in compliance with European Union regulations. Additionally, its modernization efforts help the service provider attract new, skilled talent.

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Robert Stanko
Managing Director of IT, APIS IT

Software
- Red Hat® OpenShift® Container Platform
- Red Hat OpenShift Container Storage (now Red Hat OpenShift Data Foundation)
- Red Hat Integration
  - Red Hat AMQ
  - Red Hat Fuse

Government
- 490 employees

Benefits
- Created DevOps environment for improved consistency and transparency
- Improved support for GDPR and other regulatory compliance
- Enhanced talent attraction with adoption of innovative technology
Modernizing 20 years of legacy government IT systems

Partly owned by the government of Croatia and the city of Zagreb, APIS IT LLC works with government ministries, public administration bodies, and utilities providers to provide critical IT infrastructure. It helps these clients plan, develop, and maintain information systems that are responsible for a variety of public services, from taxes and building permits to customs and voting IT systems.

To support its work in recommending innovative IT initiatives to improve internal and citizen-facing experiences, APIS IT recently established an IT modernization program that required balancing new approaches with the security and reliability required for government IT.

However, the success of this program required addressing a complex environment created by the legacy systems the organization has adopted over the past 20 years—from monolithic COBOL (common business-oriented language) mainframes to enterprise Java™ and Microsoft .NET application frameworks.

APIS IT sought to create a single, central platform to connect its modern technology with its diverse existing infrastructure. “We want our teams to be able to use the same environment and technology, following consistent processes and relying on standard documentation,” said Robert Stanko, Managing Director of IT, APIS IT.

Migrating hundreds of applications and projects to Kubernetes with Red Hat OpenShift

APIS IT decided that an open source platform would prevent vendor lock-in and help integrate its diverse IT environment. After initially deploying Docker, the service provider decided to migrate to Red Hat OpenShift to gain container orchestration capabilities. APIS IT is the first organization in Croatia and the Adriatic Region to deploy Red Hat OpenShift to production.

“The open source world is where innovation happens,” said Stanko. “When Red Hat, a major open source company, chose Kubernetes, we realized it was the winning combination. Communities are great for development innovation, but enterprise support is vital. With Red Hat, we have the reassurance of expert support and a clear, transparent roadmap.”

Based on Red Hat Enterprise Linux® and Kubernetes, Red Hat OpenShift is an enterprise container platform that provides automated operations for managing hybrid and multicloud deployments and improving developer productivity. APIS IT has standardized application development on Red Hat OpenShift across programming languages—including Java, .NET Core, Node.js, and more. To support this new platform, APIS IT added Red Hat OpenShift Container Storage, an optimized software-defined storage solution based on Red Hat Ceph® Storage. After its initial Red Hat OpenShift deployment, the company deployed Red Hat Integration technologies, including Red Hat AMQ and Red Hat Fuse.

APIS IT now runs more than 80 production projects in its Red Hat OpenShift environment, including applications for customs administration, geographical information system (GIS), and elections and referendums. Parts of the Tax Administration Information system, including PIN management, have also been migrated to Red Hat OpenShift. The service provider is now working to migrate more than 200 legacy Java applications and services, including some like the GIS system applications that are being completely reengineered and rewritten from standard .NET language.
“Red Hat is pleased to be working with APIS IT, an organization that is seen as a pioneer in OpenShift adoption in Croatia. Thanks to APIS IT experts, we have successfully created a foundation for Red Hat OpenShift use to grow in the Adriatic Region,” said Filip Dalek, Channel Sales Account Manager, Adriatic Region, Central and Eastern Europe, Red Hat.

**Balancing innovation and risk with a standardized enterprise environment**

**Created DevOps environment for improved consistency and transparency**

Standardizing application life cycle management with Red Hat OpenShift has helped APIS IT’s teams adopt a responsive, efficient DevOps work approach. Formerly isolated developers and operations staff can now collaborate in a consistent infrastructure environment.

User-friendly dashboards provide transparent visibility into system complexity, versions, costs, number of pods running, and application use of CPU and other resources.

“Red Hat OpenShift helps ensure all of our teams stay informed and aligned,” said Stanko. “We are all using Kubernetes containers and following the same development, testing, and deployment processes. The visibility into our systems and applications has helped even teams who were working effectively before to embrace this new technology and mindset.”

**Improved support for GDPR and other regulatory compliance**

Data sovereignty—the idea that data is subject to the laws of the country where it is collected—is a key consideration for APIS IT. The European Union (EU)’s General Data Protection Regulation (GDPR) requires publicly owned companies in Europe to understand where data they collect and process is stored and managed. APIS IT is also part of Euritas, a group of publicly owned European information and communications technology (ICT) providers to public sector clients.

“The aim of APIS IT and other European public IT service providers is to reduce vendor dependency, preferably through open source solutions,” said Juliana Štrbić, Head of PR, APIS IT. “With greater flexibility and choice, open source opens a path for EU member states to be digitally independent through a national cloud strategy and mitigate GDPR noncompliance.”

**Enhanced talent attraction with innovative reputation**

A modern IT environment built on Red Hat OpenShift is helping APIS IT attract in-demand, skilled talent—beginning when prospective employees are attending higher education institutions. Under staff supervision, visiting students can try out the technology for themselves on example projects. Some students are invited to participate in production projects during the school year to enhance their studies.

“Students visit us a couple of years before they apply for their first postgraduate job,” said Stanko. “They see our latest technology and know we are not talking about legacy mainframes anymore. That experience helps us to attract the best people to work for us.”

Additionally, APIS IT organizes an OpenShift meeting each year, spreading its reputation for technology innovation further. “Our OpenShift meetups attract a lot of interest here in Zagreb and neighboring countries, such as Slovenia,” said Štrbić.
Expanding modernization efforts to new applications

After successfully creating a single platform for Java, .NET Core, Node.js, and other application development, APIS IT plans to continue migrating legacy systems acquired over two decades to Red Hat OpenShift. In the near future, the business also plans to expand its Red Hat product portfolio to adopt Red Hat Advanced Cluster Management for Kubernetes and Red Hat Advanced Cluster Security for Kubernetes (formerly StackRox Kubernetes Security Platform). These solutions will help APIS IT extend the value of its Red Hat OpenShift environment by deploying apps, managing multiple clusters, and enforcing security and access policies at scale.

“Red Hat OpenShift has provided us with a new transparent IT model,” said Stanko. “This solution is strategically important to our business, and we will continue to expand its use across our organization.”

About APIS IT

For more than 50 years, APIS IT has provided strategic, professional, and implementation services to the public and government sector organizations of the Republic of Croatia. It helps them in the planning, development, and support and maintenance of their information systems.

Innovation is the core of open source. Red Hat customers use open source technologies to change not only their own organizations, but also entire industries and markets. Red Hat Innovators in the Open proudly showcases how our customers use enterprise open source solutions to solve their toughest business challenges. Want to share your story? Learn more.