

Westech creates microservices-based foundation for modern digital services with Red Hat OpenShift







Software and services

Red Hat® OpenShift® Dedicated

Red Hat Consulting

Westech helps media companies across Europe and the Americas deliver engaging digital direct marketing campaigns. To keep pace with growing demand at scale, Westech sought to adopt a microservices-based application development architecture. With guidance from Red Hat Consulting, Westech adopted Red Hat OpenShift Dedicated, a fully managed solution that runs in an Amazon Web Services (AWS) cloud. With the addition of DevOps and continuous integration and continuous delivery (CI/CD) approaches, developers can now provision new environments in minutes and deliver new features in months. The company can also respond to rapid, massive traffic increases on demand—and at lower cost. As a result, the company can focus on delivering intelligent marketing solutions.



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Mike Kelliher

Director of Technology, Agora Publishing Services Ireland

IT services

150 employees

Benefits

- Reduced feature time to market from months to weeks with CI/CD and self service
- Improved system scalability and reliability while reducing OpEx
- Expanded intelligent business capabilities to support new market demands

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Keeping pace with the evolution of digital marketing

Westech helps leading private-sector media companies in the health, finance, and travel industries connect with their audiences through these campaigns. Operating as Agora Publishing Services Ireland in Europe and as 14 West Administrative Services in the United States, Westech supports clients in Ireland, the United Kingdom, France, Germany, Spain, Switzerland, Australia, Argentina, and the United States.

Initially founded as a direct mail marketing company, Westech began its digital transformation in 2000 with a shift from paper-based to email communications. It now offers several digital marketing technology solutions: Westech Marketing Cloud (WMC) for campaign orchestration and management, Advantage for agency management, BlueShift for intelligent customer engagement, and a platform and integration solution with application programming interface (API) and enterprise service bus (ESB) capabilities.

Westech's application environment now supports not only email lists and related opt-in capabilities, but also e-commerce, customer relationship management (CRM), and more. However, poor targeting of batch emails to newsletter subscribers and increasingly complex client needs led Westech to consider how to make this legacy environment−comprised of large, Java™-based applications−more responsive and efficient.

"We were still doing massive batch email blasts to millions of newsletter subscribers. We wanted to evolve to more intelligent services to help our clients better understand and reach their audiences," said Mike Kelliher, Director of Technology, Agora Publishing Services Ireland.

To modernize its application infrastructure, Westech decided to adopt a container-based, cloud-native microservices architecture and lay the foundation for a DevOps work approach.

Build a new foundation for application development and integration with Red Hat

In search of a solution that would not only provide the container capabilities to meet client demands, but also prevent vendor lock-in, Westech turned to a local team from Red Hat Consulting.

"We knew about Kubernetes and containers, but talking with the Red Hat consultant we hired got us interested about Red Hat OpenShift," said Kelliher. "That excitement only grew after our team's visit to Red Hat's Executive Briefing Center in Boston to learn more about the platform and how it could help us build, deploy, and scale our applications faster."

To test this potential solution, close to 50 people from Westech's development team then completed a three-day OpenShift hackathon, with assistance by two Red Hat engineers. The success of the hackathon led the company to move forward with the project, starting with an architectural review with Red Hat Consulting focused on system integration.

"Red Hat's consultants gave us a lot of excellent feedback, including reports that highlighted some shortcomings and potential solutions for them," said Kelliher. "The way Red Hat approaches IT modernization is refreshing."

"Before, we struggled to deliver high-quality digital marketing services at the pace and cost we wanted. We're now a very different organization, with a modern mindset, and we credit Red Hat as a big contributor to that success, from vision to execution."

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Westech has now rearchitected its WMC offering as Microsoft .NET Core microservices hosted by Red Hat OpenShift Dedicated, a fully managed container platform running in an Amazon Web Services (AWS) cloud. The company's new system architecture also includes the Kong Enterprise API gateway, Talend ESB, and Hasura GraphQL Engine, running in Red Hat OpenShift, to support API, event streaming, and other integration needs.

Delivering digital campaigns and features at the speed and scale of demand

Reduced feature time to market from months to weeks with CI/CD and self service

The iterative, modular structure of Red Hat OpenShift containers, combined with modern development tools, has helped Westech establish a continuous integration and continuous delivery (CI/CD) application pipeline. OpenShift Dedicated support the development team's choice of tools, including the Go programming language, Argo CD declarative GitOps tool, and the Tekton open source CI/CD framework. Now, team members can shift between projects or more easily collaborate. Self-service provisioning also helps Westech's developers provision databases or environment independent from the IT operations team, minimizing delivery times.

"During the hackathon, our more traditional Java developers who were used to waiting three months for physical server or Java environment setup saw that they could get a new development environment in just ten minutes with OpenShift Dedicated," said Kelliher.

As a result, new features can now be delivered in just a few months, instead of more than a year. For example, the company recently used the Couchbase JSON NoSQL database tool, running in OpenShift Dedicated, to create Contactly, a customer service application that helps its call centers handle interactions more efficiently.

"We're getting closer to our vision of a DevOps approach. With more independence and standardization, IT operations is now seen less as a controlling gatekeeper function and more as a supportive partner for developers," said Kelliher. "From writing code to committing, testing, scanning, deploying, and getting it to release, we cut our lead time from six months to six weeks."

Improved system scalability and reliability-at lower cost

Previously, high traffic from successful client marketing campaigns risked outages on Westech's servers. To accommodate this demand, the company would add servers to WMC as needed—increasing operating costs by maintaining more than 1,200 virtual servers, many sitting mostly unused.

By combining the modular Red Hat OpenShift Dedicated with an easy-to-scale AWS cloud, Westech can now rapidly scale its server environment up or down as needed to respond to campaign traffic. At the same time, the company has cut its number of physical servers by 50%, improving operating expenditure (OpEx).

"We're now more confident that our production environment can handle the high volume of traffic we hope our clients' campaigns experience," said Kelliher. "For example, if one called us and said they have 600,000 attendees on a webinar, we can temporarily scale WMC up to ensure there are no lags or performance issues."

Expanded business capabilities to support new market demands

In addition to helping its clients meet complex direct marketing needs faster, Westech can now help them take advantage of intelligent data insights, such as behavioral analytics, to segment and address their customer bases.

"By replacing our monolithic platforms using Red Hat OpenShift, we have been able to build an environment that lets us take advantage of machine learning to collect customer data points and actions into a data platform that gives us a single picture of the customer," said Kelliher. "We can then better predict their behavior and target marketing to reach them."

Continuing a successful digital transformation and DevOps journey

After improving the speed and scale of its service delivery, Westech is now applying its container technology capabilities to new business needs, such as expanding WMC to support dynamic promotional content in a standardized environment. Its development team is also working with Red Hat Consulting to develop a DevOps culture training program to help more teams benefit from an iterative, continuous, and collaborative work approach.

"Before, we struggled to deliver high-quality digital marketing services at the pace and cost we wanted," said Kelliher. "Our relationship with Red Hat's experts and the powerful container capabilities of Red Hat OpenShift Dedicated have helped us achieve our goals. We're now a very different organization, with a modern mindset, and we credit Red Hat as a big contributor to that success, from vision to execution."

About Westech

Agora Publishing Services Ireland (APSI) and 14 West, collectively known as Westech, provide the platforms and systems that support some of the world's leading privately owned media companies in the health, finance, and travel industries. Their expert teams strive to provide a flexible and innovative foundation for growth. Day to day, they build and support the enterprise applications used by a network of independent businesses, allowing them to focus on profits and business growth. https://www.pubsvs.ie



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About Red Hat

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers develop cloud-native applications, integrate existing and new IT applications, and automate and manage complex environments. A trusted adviser to the Fortune 500, Red Hat provides award-winning support, training, and consulting services that bring the benefits of open innovation to any industry. Red Hat is a connective hub in a global network of enterprises, partners, and communities, helping organizations grow, transform, and prepare for the digital future.

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