

Stability. Reliability. Security.

How Education Payroll Limited (EPL) teamed with Deloitte to take application development to a new level, based on Red Hat OpenShift technology and DevOps principles.

EPL is responsible for paying around 96,000 teachers and support staff in about 2,500 schools every two weeks. Payroll processing is approximately \$210 million+ per pay period and more than \$5.1 billion per year. Over the years Deloitte and EPL have developed a strong relationship rooted in helping EPL and its stakeholders repeatedly achieve their goals.

Driven by the desire to be responsive to its customers, EPL had a vision to streamline development, test, deploy, and speed to market using a platform. EPL identified Red Hat OpenShift as the technology of choice for the platform and engaged Deloitte to build this new capability. Working with EPL, we would deliver the vision while upskilling the internal team.

The ultimate vision was for this platform to serve as the foundation for all future solution development, allowing it to happen at a faster pace and with reduced coordination among independent teams by following DevOps principles. Other required elements of the platform were built-in, self-service APIs, tools, services, knowledge, and support. This would make it a compelling internal product that developers would want to use.

Our approach

With Red Hat OpenShift at the core, we built a platform powered by Kubernetes and Docker. DevOps principles and the agile SAFe methodology guided our approach and helped manage the platform creation work.

Our methodology included:

- Reinforcing the DevOps culture and principles daily, sharing knowledge, and replacing linear project methods with feedback loops
- Automating manual processes with Red Hat Ansible Automation Platform and Jenkins Pipelines
- Driving product deployment with GitOps
- Knowledge sharing among team members with online sessions and formal training programs
- Regularly demonstrating Red Hat OpenShift capabilities to help developers understand the value of the platform

The new platform serves as a foundation, providing developers with a single interface for the entire system. As a result, EPL developers can automatically apply appropriate controls and security settings across the board without worrying about where the data is sitting—be it in the cloud or in an on-premise system.

The first business application built and rolled out from the new platform was EdPay, a fully online payroll service for schools. EdPay is a customer-centric payroll service solution capable of onboarding new employees, updating details of existing employees, monitoring payroll, and more. The platform's advanced development and deployment methodology allowed EPL customers to be involved in the decision-making process during application creation: understand their context, share wireframes and prototypes, co-create and test, and then start development.

This development approach and final platform “product” presented a new way of working for the majority of people involved. It's not only a shift in the types of tools used daily, but also in how they approach software delivery.

By the numbers

TECHNOLOGY

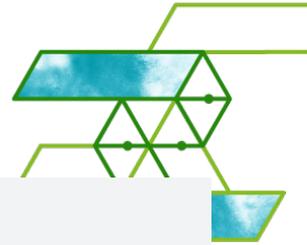
1 layer of software to connect developers in a single interface for the entire system

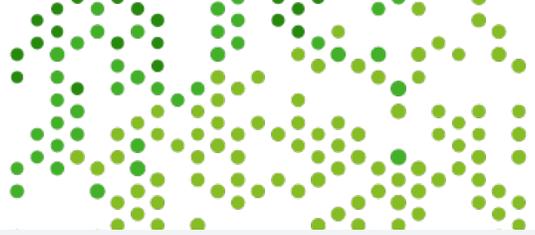
IMPLEMENTATIONS

1 platform powered by OpenShift to change application development and deployment for the future

RESULTS

All participants can contribute their specialized knowledge to a unified platform that supports cohesive development environments





The impact

Adoption of an Red Hat OpenShift development platform following DevOps principles provides considerable value to all of EPL—increased productivity, improved stability, higher reliability, and stronger security.

Additional platform benefits include:

-  Mean time to deploy a product using the platform has gone from more than eight hours scheduled on a weekend to **under five minutes on demand during any weekday**
-  Processes that required more than three days for approval and scheduling are now an **automated standard change** that can be executed on demand
-  Provides versioned dev, test, pre-production, staging, and production environments **on demand**
-  Allows developers and testers to **shift left** by testing pull requests and executing automated API and UI testing
-  Enables the business to **rapidly experiment with new features** like integrating a content management system and user guidance
-  Delivers a **self-service, internal product** that is well positioned to provide value to EPL

Why it worked

Trusted relationships. Working together, Deloitte has helped EPL adopt a practice of hiring professional services in an apprenticeship model: as the professional services provider, we establish the frameworks, tools, and practices while training and mentoring the EPL team. When this DevOps project came up, Deloitte already had a strong record of doing what was right by EPL and demonstrating our commitment to the organization's long-term success, so the team was comfortable having us lead the way.

The new OpenShift platform offers a self-service development environment that is well positioned to provide value to EPL now and into the future.

Modernizing for a cloud-native world

Deloitte and Red Hat support business and technology leaders in delivering applications faster by modernizing their IT infrastructures. Using Red Hat's open source technology, our industry experience, and DevOps methodologies, we help drive the business integration, IT automation, and management needed to thrive in a cloud-native world. Together, we can help you accelerate innovation, reduce IT complexity, and deliver better business outcomes.

Ready to see real results?

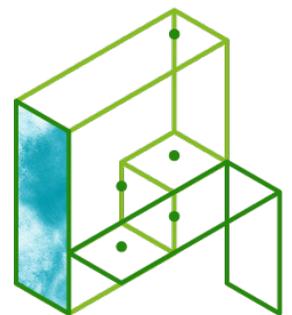
Then we should talk. We can help you better understand how Deloitte and Red Hat can help you modernize for business agility using open source technology.

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