Education Payroll Limited builds digital payroll system with Red Hat technology

Education Payroll Limited manages payroll services for New Zealand’s 2,500 schools. To replace complex, time-consuming manual processing for 14,000 submissions every two weeks, the organization created a digital payroll application, called EdPay. Working with local Red Hat Global Systems Integrator Deloitte New Zealand, Education Payroll used Red Hat OpenShift and Red Hat Ansible Automation Platform to create a reliable, scalable foundation for EdPay. An accessible, efficient experience for school administrators and principals, EdPay now supports near real-time status information and zero-downtime updates to enhance available features and capabilities.

Software
- Red Hat® OpenShift®
- Red Hat Ansible® Automation Platform

Partner
Deloitte New Zealand

Education
- **99,000 teachers and support staff**

Benefits
- Increased user satisfaction by 30% in quarterly surveys
- Saved weeks of work with streamlined application life-cycle
- Improved collaboration with DevOps and agile approaches
- Eliminated deployment downtime

“Administrators can go into their application, see their staff list, review details, and immediately get feedback on their submissions. EdPay has transformed the entire experience with incredible improvements to visibility and usability.”

Anna Brodie
Head of Technology and Products, Education Payroll Limited
Modernizing payroll services for the education workforce

Education Payroll Limited operates under contract to the New Zealand Ministry of Education to deliver an efficient, accurate, and sustainable payroll service to the country’s schools. It is responsible for paying approximately NZ$5.6 billion per year to 99,000 teachers and support staff in 2,500 New Zealand schools.

To ensure employees received timely, accurate payments, Education Payroll sought to modernize its processes and supporting technology. Previously, the organization received more than 14,000 hand-written forms from school administrators at its processing center every two weeks. These forms were manually entered into the payroll system, following a variety of business rules that created complexity and introduced risk of errors.

“The payroll process was not only time-consuming for our staff, but also frustrating for school administrators,” said Anna Brodie, Head of Technology and Products, Education Payroll. “There was no tracking information or visibility into the status or accuracy of a form until after it was processed and a report was produced. With also having to adjust for leave and allowances, it was difficult for schools to ensure pay was correct.”

To deliver a streamlined, transparent user experience to schools, Education Payroll decided to replace its manual, paper-based system with a new digital application, EdPay.

Adopting a cloud-native service foundation with Red Hat OpenShift

After reviewing multiple open source and enterprise applications, Education Payroll decided to work with local Red Hat Global Systems Integrator Deloitte New Zealand (NZ) to deploy Red Hat OpenShift on-premise as the foundation of EdPay.

“Red Hat OpenShift came with enterprise support, provided the kind of stable and security-focused performance we need, and didn’t require a lot of custom work to get started. Even though we are operating on-premise, we get cloud-native-like capabilities,” said Anna.

Red Hat OpenShift is a Kubernetes container application platform that includes everything needed to run containers reliably and consistently in production: an enterprise Linux® operating system, container runtime, networking, monitoring, registry, and authentication and authorization solutions. Education Payroll originally deployed Red Hat OpenShift 3 but migrated to Red Hat OpenShift 4 to take advantage of enhanced operational capabilities, such as upgradability, a better Day 2 operations experience, and platform/workload metrics out of the box.

The platform’s automation capabilities are enhanced by Red Hat Ansible Automation Platform, an agentless IT automation technology that helps teams manage complex deployments and automate repetitive tasks with reusable, human-readable playbooks.

Deloitte NZ and Education Payroll worked closely with future end users—school administrators and principals—to provide feedback on early releases of EdPay before launching to production. Its successful innovation using enterprise open source technology earned Education Payroll recognition as a winner of a 2021 Red Hat Innovation Award.
Delivering timely, accurate payroll services to 2,500 schools

Achieved 30% increase in user satisfaction with streamlined payroll process

Before the switch to EdPay, school administrators had little access to information they needed, and payroll processes were complex. There are more than 50 different forms, each with up to 100 pages of instructions on how to complete it correctly.

Now, transactions are processed in near real-time, providing information on the resulting changes to teacher pay, allowances, or other categories. This shift from paper-based to digital processes has helped reduce payroll time for administrators by 25%. As a result, Education Payroll has seen its score on quarterly customer satisfaction surveys increase from 56% to 80%.

Saved weeks of work with streamlined application life-cycle

Previously, Education Payroll completed 3 to 4 releases per year. Replacing its traditional, monolithic system foundation with an automated, container-based Red Hat OpenShift environment helps Education Payroll build, test, and deliver services faster.

This shift supports the organization’s adoption of a continuous integration and continuous delivery (CI/CD) approach that includes GitOps, an operational model that applies DevOps best practices to CI/CD.

"Before, it could take hours or weeks to set up infrastructure and install the software," said Anna. "With Red Hat OpenShift, 30 seconds later I have a fully built server and an application container, with the right versions in the right configuration every time."

Improved collaboration with new DevOps and agile approaches

As part of its IT modernization efforts, Education Payroll adopted several new workflow approaches to improve efficiency and collaboration.

"Education Payroll’s shift to modern approaches like DevOps and SAFe [Scaled Agile Framework] was part of a cultural journey to strategically adopt new practices to take advantage of the self-service tools and other capabilities of OpenShift," said Everett Toews, Senior Lead Specialist, Deloitte NZ.

The organization uses Red Hat Ansible Automation Platform to support these new approaches by automating manual processes using repeatable playbooks, helping teams focus on working together to create new services and enhancements at the speed demanded by customers.

Eliminated deployment downtime

Latency due to data and transaction volumes on public cloud systems would negatively affect Education Payroll’s user experience. Red Hat OpenShift uses cloud-native principles to process related data locally on the platform and automates processes to respond to changing demand and complexity.

An infrastructure as code (IaC) approach means system updates can be iteratively tested and moved forward without downtime or disruption to workflows. Additionally, Education Payroll’s new foundation for EdPay is supported by built-in monitoring, with custom alerts for chosen metrics, as well as Red Hat’s ongoing product enhancements.

"Having enterprise support behind the innovation of the community is key to making sure we’re getting the right features and services delivered to our customers successfully," said Anna. "We know we can get security patches, or call and get support when things aren’t quite right, to maintain our speed and deliver on time."
Continuing efforts to improve service user experience

With Red Hat OpenShift as the system foundation for EdPay, Education Payroll plans to continue finding ways to improve its customer experience.

"We will continue to develop new functionality in collaboration with our customers, taking their feedback and iterating until we co-design something that meets their needs," said Anna.

About Education Payroll Limited

Education Payroll is a core part of New Zealand’s education sector and manages the payment of the people at the heart of the country’s education system. Education Payroll is responsible for paying more than 99,000 teachers and support staff in around 2,500 schools every 2 weeks. The payroll bill is approximately NZ$214 million per pay period. [www.educationpayroll.co.nz](http://www.educationpayroll.co.nz)

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