

Digdir improves security and access to digital public services

**Headquarters**

Oslo, Norway

Industry

Government

Size

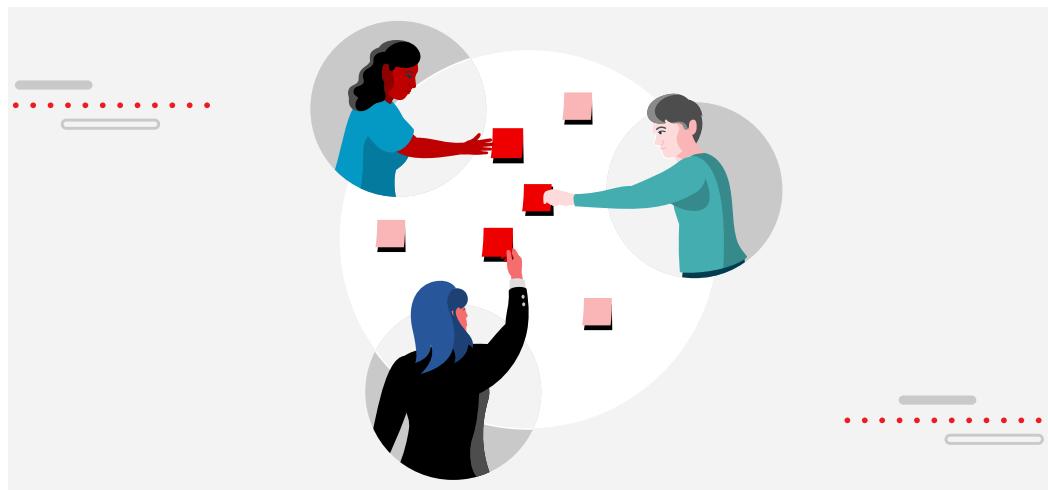
360 employees

"Red Hat OpenShift underpins our DevOps journey. The platform offers high flexibility and low maintenance, so when it comes to modernizing our development strategy, we can set our sights high."

Kjetil Melheim

Team Leader, Digdir

More than 4 million Norwegian citizens access online public services using Digdir's systems. The agency was using traditional approaches and technologies to develop its online applications, but to accelerate development and deployment, it decided to modernize. Digdir now uses Red Hat OpenShift to support a microservices architecture and DevOps approach. Using the platform, developers are better equipped to embrace DevOps and have greater job satisfaction. Digdir has improved time to market with new releases deployed faster and more frequently, and Norway's citizens enjoy better online experiences with higher-quality systems.

**Software**

Red Hat® OpenShift®

Red Hat OpenShift Platform Plus

Partner

Tietoevry

Benefits

- ▶ Enhanced security with built-in best practices
- ▶ Accelerated time to market, with increase in frequency of releases
- ▶ Improved experiences for both developers and users

"Red Hat OpenShift is stable, secure, and eases maintenance. There's no underlying vendor lock-in so we can run our workloads wherever suits us, and in combination with Red Hat OpenShift GitOps it provides consistency across environments for us."

Bjorn-Erik Strand

Platform Engineer
Digdir

Accelerating digitalization across Norway

The Norwegian Digitalization Agency's (Digdir) role is to accelerate digitalization across Norway's public sector. Among other systems, the agency provides the online gateway and identity management systems used by 4 million Norwegian citizens to access public services. With 30 log-ins every second, this portal must be reliable, secure, and highly available, with all citizen data processed in compliance with General Data Protection Regulation (GDPR).

Digdir's developers were using traditional methods and technologies to deliver the online portal and other key public service systems. Once an application was built, responsibility for deploying and managing the application was handed over to the hosting partner. Due to this model, there was a cost associated with every deployment, which limited the number of application releases.

When the existing hosting partnership came to an end, Digdir decided to modernize its approach and platform. The agency had already started to transition to a microservices architecture, and was keen to embrace DevOps processes.

"Our development team wanted more control of their applications, and we wanted to reduce reliance on external resources," said Kjetil Melheim, Team Leader, Digdir. "We recognized that by adopting a DevOps approach, we could enable faster development, more frequent releases, and greater security."

Modernizing development with microservices and DevOps

Digdir's new hosting partner, Tietoevry, proposed Red Hat OpenShift to support the agency's transition to more modern development. *"Red Hat OpenShift is stable, secure, and eases maintenance,"* said Bjorn-Erik Strand, Platform Engineer, Digdir. *"There's no underlying vendor lock-in so we can run our workloads wherever suits us, and in combination with Red Hat OpenShift GitOps it provides consistency across environments for us."*

Digdir now has a Red Hat OpenShift cluster in Azure for development, plus 3 clusters at Tietoevry for management, testing, and production. Keeping clusters onsite makes it easier for the agency to comply with GDPR requirements for storing citizen data. Each cluster automatically has the same configuration, enabling Digdir to seamlessly move applications between clusters.

Digdir hosts approximately 300 applications running in Red Hat OpenShift, including those that support the Norwegian government's critical identity management system. While some of these applications have been rewritten to fit Digdir's microservices architecture or migrated, others have been developed natively in the platform.

Digdir leverages a number of additional Red Hat OpenShift components, including Red Hat OpenShift GitOps to support best-practice DevOps processes. OpenShift GitOps provides workflows to integrate git repositories, and tools for continuous integration (CI) and continuous delivery (CD) such as Argo CD, and Kubernetes.

Red Hat OpenShift Platform Plus, part of the Red Hat OpenShift portfolio, provides a single platform for enterprises to build, deploy, run, manage, automate, and safeguard modern applications at scale across hybrid cloud environments. Digdir can leverage Red Hat OpenShift Advanced Cluster Security for Kubernetes (RHACS) to improve security. As part of the OpenShift Platform Plus portfolio, RHACS provides Digdir with policy-based governance, risk, and compliance, multicluster lifecycle management, and application lifecycle management.



Digdir also benefits from Red Hat's continuous patching and upgrades for the OpenShift platform. "With a single click, we can upgrade all our components to the latest versions, with no impact on our workloads," said Melheim. "This means we're always up to date without having to expend resources on testing and rolling out upgrades."

Improving digital experiences for millions of citizens

Enhanced security with built-in best practices

Red Hat OpenShift's security capabilities and automated restrictions have simplified Digdir's adoption of security best practices for containerized applications, such as role-based access and granular deployment policies.

"With built-in security, it's much easier to ensure our applications and processes adhere to best-practice approaches," said Melheim. "The Red Hat platform helps us enforce security controls, mitigate threats, and comply with regulations."

Accelerated time to market, with increase in frequency of releases

With Red Hat OpenShift, Digdir can deploy new applications and releases whenever it needs to and is no longer limited by costs or resource availability. This resulted in a 10-fold increase in deployments, from once a week to at least twice a day – whenever best suits the development team.

"As well as removing the external dependencies in launching new releases, with the platform's automated approach it's much faster and more cost-effective to move systems into production," said Melheim.

Improved experiences for developers and users

Greater insights into how applications are performing, thanks to Red Hat OpenShift's metrics and monitoring, means developers can make them more robust and secure. With the Red Hat platform combined with a DevOps approach, developers are fully equipped with the right tools and have more control and visibility of the outcomes of their applications, which enhances the developer experience and job satisfaction.

"The team has been really enthusiastic and keen to migrate their applications to Red Hat OpenShift," said Strand. "Our modernized approach and Red Hat platform also help to attract and retain employees, as everyone likes to work with the latest technologies."

With a team of skilled developers creating high-quality applications, Digdir can also offer faster, better, and more intuitive online experiences for the millions of citizens who use its systems.

About Tietoevry

Tietoevry creates purposeful technology that reinvents the world for good. It is a leading technology company with a strong Nordic heritage and global capabilities.

Tietoevry's 24,000 experts globally specialize in cloud, data, and software, serving thousands of enterprise and public sector customers in approximately 90 countries.

Embracing modern approaches to development without limitations

Following its success with Red Hat OpenShift, Digdir is now focused on 3 key areas to further modernize development - resource management, security, and providing developers with easier access to the tools and technologies they need. To align with these goals, Digdir is currently looking at Red Hat Developer Hub. Developer Hub is an enterprise-standard version of the open source project Backstage, which aims to promote efficiency and collaboration with a single point of access to the tools developers need.

"Red Hat OpenShift underpins our DevOps journey," said Melheim. "The platform offers high flexibility and low maintenance, so when it comes to modernizing our development strategy, we can set our sights high. And by continuously improving our approach to development, we can continuously improve access to digital services for citizens across Norway."

About Digdir

The Norwegian Digitalization Agency (Digdir) is the primary tool of the Norwegian government for faster and more coordinated digitalization of its public sector. Digdir is subordinate to the Ministry of Digitalization and Public Governance.



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.