Digipolis Ghent supports city’s digital services with Red Hat OpenShift

Digipolis Ghent provides information and communications technology (ICT) services to the city of Ghent, Belgium. To help the city provide digital self-service capabilities to its departments, citizens, and third-party service providers, Digipolis created a container-based application environment. Based on Red Hat OpenShift Container Platform and supported by Red Hat storage and management solutions, this platform lets Digipolis and the city more easily collaborate to create self-services capabilities faster and more efficiently. The success of the platform has led Digipolis to embrace an open approach to creating innovative services, supported by open source communities and Red Hat’s expertise.

“We like the fact that Red Hat software is community-based, because we share that culture of openness. Many people often know more than one person, and we know the community and Red Hat will continue to evolve and develop the solutions we’re using.”

Jan De Busscher
Project manager, New Technologies, Digipolis

Software and services
- Red Hat® OpenShift® Container Platform
- Red Hat OpenShift Container Storage
- Red Hat 3Scale API Management
- Red Hat Ansible® Automation
- Red Hat Consulting
- Red Hat Training

IT services industry
- 300 employees

Benefits
- Established digital services platform to citizens and departments
- Improved API management for sharing data with users and partners
- Gained access to innovative, community-developed open source technology backed by expert support
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Improving government services with open data access

Digipolis Ghent delivers information and communications technology (ICT) services to the Belgian city of Ghent. Its customers and end users include citizens and government departments, including city administration, law enforcement, fire services, education, social work, and waste collection. The ICT provider designs and procures technology to help both cities fulfill their IT strategies, from software and hardware to network and telephony infrastructure.

For example, a key component of the City of Ghent’s IT strategy is MyGhent, a platform that hosts digital self-service government capabilities for both citizens and service providers. With this self-service approach, Ghent’s government hopes to offer an improved service experience while also reducing internal costs.

To create a foundation for new, cloud-native applications, open data access, and agile service delivery as part of this offering, Digipolis sought a container-based infrastructure solution that could easily be managed using application programming interfaces (APIs).

“We were behind, our systems were outdated, and we acknowledged that we needed to take a big step to be more open in our IT approach,” said Jan de Busscher, Project Manager of New Technologies at Digipolis. “We recognized we needed a container platform, managed with APIs, to meet our goal of deploying new services faster and more frequently.”

Finding an innovative yet stable container application platform

After a proof of concept and through testing, Digipolis and the City of Ghent decided to use Red Hat OpenShift as the scalable, stable foundation for 19 MyGhent services, with access to local support and capabilities for continued service innovation.

“We hadn’t even heard of OpenShift when we started determining the project requirements,” said de Busscher. “After we did a thorough proof of concept, we very quickly saw it had the features, functionality, and stability we were seeking. During testing, the Red Hat solution was fully operational in four days, while a rival platform was still experiencing issues after two weeks.”

Red Hat OpenShift Container Platform offers full control over Kubernetes environments, whether on-premise or in the public cloud, giving developers and IT operations a single platform to collaborate to build, deploy, and scale applications. Digipolis added Red Hat OpenShift Container Storage, based on Red Hat Gluster Storage, to provide highly integrated, software-defined storage for the new container environment.

The ICT provider also deployed Red Hat 3scale API Management to share and manage MyGhent APIs, as well as Red Hat Ansible Automation to provide automation across the OpenShift environment.

Working with Red Hat Consulting to implement this enterprise software environment, Digipolis and Ghent have created a scalable, stable platform for service creation and maintenance. A further 25 services are under construction in the new environment. Together, these services support all 11,000 City of Ghent employees, 3,000 people linked to the Education Department of the Flemish Government, and 80,000 citizens with digital Ghent profiles.
Supporting faster, collaborative service creation

Faster, simpler service development and delivery

With the new Red Hat container environment, Digipolis and Ghent are creating and launching new digital services for citizens and service providers faster and more cost-effectively.

For example, citizen-facing services offered via MyGhent include litter reporting that coordinates cleaning service crews, school holiday childcare registration for parents, and low-emission vehicle registration.

Additionally, Digipolis Ghent uses reusable templates for building, and testing new services in a continuous integration and delivery (CI/CD) approach, further speeding time to market.

"Many steps are repeatable or automated, and OpenShift is language-agnostic, so we can use it to create reusable packages for any programming language. We don’t have to duplicate efforts or worry that something will go wrong. It takes only a few hours to make a new service available with the MyGhent Platform," said de Busscher.

Flexible, agile platform for collaborative innovation

Digipolis has created a central environment for agile development and collaboration with city government departments and stakeholders, who offer additional skills and resources for new service development.

To open its data and technical solutions to these third-party collaborators, Digipolis relies on 3scale API Management to provide easier API management, access control, and identity verification.

"Red Hat 3scale API Management fits in with our organization because it evolves as we evolve," said de Busscher. "It’s easy for us and for our users to understand."

Community-developed yet supported technology

By choosing enterprise open source solutions from Red Hat, Digipolis can take advantage of open source community innovation with less risk.

"We like the fact that Red Hat software is community-based, because we share that culture of openness," said de Busscher. "Many people often know more than one person, and we know the community and Red Hat will continue to evolve and develop the solutions we’re using. We can keep progressing as Red Hat’s software progresses."

Digipolis’s staff have taken advantage of the opportunity to learn more about OpenShift and other new technology and how to effectively operate the Red Hat environment. For example, they have participated in Red Hat Training on 3scale API Management, delivered at a facilities partner.

"We prefer to manage and fix our own IT, but it’s no use having an advanced solution and not understanding how it works. With Red Hat, we can learn how to optimally manage the technology. It’s easier to get support if we need it by using many products from one vendor. We know Red Hat is on call if we have an issue or question," said de Busscher.
Expanding open approach to new challenges

The success of its container technology deployment for MyGhent has helped Digipolis strengthen the case for continuing to use an open approach to help the city of Ghent solve its ICT challenges. For example, the company plans to continued improving its efficiency and costs by reducing the number of running applications by 2023.

Instead of the Belgian government’s usual subscription renewal of one year, Digipolis has already renewed its Red Hat subscriptions until 2022—a sign of its confidence in Red Hat’s solutions to continue to provide innovative yet supported capabilities and tools.

“Openness is one of our key themes for the future,” said de Busscher. “We want to open access to data related to waste routes, parking spaces, and more. We want to support start-ups and organizations that are scaling rapidly. Now that we have a platform for more secure, agile IT, we can focus on the services we can offer the public to improve their lives, rather than the underlying technology.”

About Digipolis

Digipolis was established in 2003 and is an ICT partner for the Cities of Antwerp and Ghent. We develop software and implement hardware, networks, and telephony infrastructure. In addition, we guide our colleagues in municipal government, OCMW (Public Centers for Social Welfare), healthcare, and law enforcement to help them implement IT projects, and ensure qualitative and stable support for operational applications and infrastructure.

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 integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.