On Top of Their Game

Global leader in athletic apparel and gear wins big with 30-minute infrastructure deployment from HashiCorp Terraform

// Infrastructure Enables Innovation
Decathlon Summary

Decathlon is the world’s largest sports retailer. Founded in France in 1976, the company set about making the pleasure and benefit of sports available for athletes of all abilities and ages around the world.

The company’s portfolio of products includes well-recognized brands like Btwin, Quechua, and Tarmak. Decathlon employs nearly 95,000 workers worldwide, spanning more than 1,500 retail locations across 50 countries.

**DECATHLON FAST FACTS**

| $ | $12.8B worldwide revenue (2018) | Significant improvements in responsiveness to market demands |
| ✂ | Minimized code errors and reduced deployment delays | 1,500+ retail locations |
| ñ | 500+ developers | 2,200+ workspaces |
Supporting the everyday athlete

From the pitch to the court and all arenas or open spaces in between, Decathlon has today’s athletes covered. For more than four decades the France-based outfitter has provided amateur and pro athletes around the world with the gear to perform (and look) their best.

Retail is a notoriously fast-moving industry in which brands must rapidly and reliably develop and launch new or updated products regularly. And while the company had long invested in product research and development to satisfy demand, it hadn’t fully accounted for the continued shift toward multi-channel selling — in-store and online — that created some new and unique challenges.

"Innovating products is one part of the business, but making it easier for teams on the ground in different businesses and markets to deliver those products to consumers became a constant challenge as the industry evolved," says Kévin Defives, an information system engineer at Decathlon. "We needed to decentralize our infrastructure operations to empower each line of business to serve the unique demands of their customers without the friction or drawn out processes of a centralized organization."

Disparate systems makes global teamwork a challenge

As a global retailer, Decathlon faces more obstacles and business challenges than smaller or domestic-focused competitors. Each brand under the corporate umbrella operates in different geographical markets and each market has its own local nuances and business culture.

More than 100 developer teams, involving over 500 developers, are tasked with providing the applications and digital experiences each brand and market demands. In the past, Decathlon relied on an internally-developed custom web solution for standing up on-premises infrastructure and used native cloud infrastructure tools for cloud-based resources in support of whichever programs and platforms each team decided they needed.

“With Terraform, infrastructure development and deployment that used to take more than a week can now be done in less than 30 minutes. Our teams have the autonomy and authority to build what they need, when they need it on their own.”

KÉVIN DEFIVES, INFORMATION SYSTEM ENGINEER, DECATHLON
However, teams quickly realized that because the various tools weren’t integrated with other core systems — the configuration management database (CMBD), security solutions, and systems monitoring tools — this approach created a litany of manual tasks that made it difficult to rapidly deploy new applications, tools, and online experiences for end users.

“Any time a developer on any team wanted to create a new on-premises or cloud instance, they’d have to involve multiple other teams to add and configure the server in the CMDB and other core systems,” Kévin Defives explains. “It could take more than a week just to get the infrastructure in place before they could begin working on their project, which ultimately slowed our ability to bring new products and experiences to market as fast as our customers wanted.”

**Challenges**

- Enabling self-service infrastructure deployment for over 500 developers globally
- Accelerating delivery of new products and customer experiences across brands
- Integrating core systems into a single infrastructure as code solution
“Terraform allows us to incorporate more automated infrastructure deployment processes, turning the IT team’s focus from operational tasks to development-oriented work. It’s a thoroughly more efficient and effective way to manage work across disparate teams and brands.”

KÉVIN DEFIVES, INFORMATION SYSTEM ENGINEER, DECATHLON

Drawing up a new playbook

After evaluating other infrastructure as code solutions, Decathlon chose HashiCorp’s Terraform to streamline its infrastructure deployment efforts because of the solution’s easy-to-understand common language, expansive and engaged community of current Terraform users, and intuitive user interface to effortlessly manage various workspaces simultaneously.

Unlike the company’s previous ticket-based infrastructure deployment system, the vendor and cloud-agnostic Terraform enables individual brand development teams to stand up their own resources faster than ever by reusing encrypted, access-controlled code variables that dynamically change to scale resources across any cloud or on-premises environment.

“Terraform allows us to automatically rebuild our infrastructure in a completely new way that ensures our testing, staging, and production environments are all well aligned,” Kévin Defives says. “Each team can develop their own Terraform modules and share them across teams for better collaboration, greater transparency, and faster deployment of essential resources for every brand in every market.”

Kévin Defives notes that Terraform has been vital in helping the company simultaneously accelerate its infrastructure deployment by unburdening its IT team with tasks like workspace backups. Additionally, the workflow allows for code reviews and approval workflows to minimize the impact of errors that may delay deployments.
Automated infrastructure for the win

According to Defives, adopting Terraform has reshaped Decathlon’s inner workings around the world. “Terraform allows us to incorporate more automated infrastructure deployment processes, turning the IT team’s focus from operational tasks to development-oriented work,” he says. “It’s a thoroughly more efficient and effective way to manage work across disparate teams and brands.”

Terraform workspaces enable Decathlon developers to work across cloud providers, teams, and environments through a single pane of glass and leverage the solution’s built-in version control system to automatically validate configuration changes for greater accuracy, fewer mistakes, and faster deployment.

“With Terraform, infrastructure development and deployment that used to take more than a week can now be done in less than 30 minutes,” Kévin Defives notes. “Our teams have the autonomy and authority to build what they need, when they need it on their own, which has dramatically improved our responsiveness to the market and ability to deliver new products and experiences customers demand.”

Outcomes

- Empowered brand and in-market development teams to stand up their own infrastructure
- Automated change management and version control to minimize code errors and deployment delays
- Reduced infrastructure deployment times from over 1 week to less than 30 minutes
Solution

Decathlon uses Terraform Enterprise to give individual brands and global development teams the autonomy and authority to rapidly deploy essential cloud infrastructure and deliver new products and digital experiences to the market faster.

Decathlon Partner

Kévin Defives is the Terraform product owner and a full stack developer for Decathlon. Prior to joining Decathlon, Defives spent several years in various software development, virtualization, and security roles.

Kévin Defives,
Information System Engineer, Decathlon

Technology Stack

- **Infrastructure**: GCP, AWS, Microsoft Azure
- **Platform**: Linux (CentOS, Red Hat), Windows server
- **Configuration Management**: Foreman, Puppet
- **Load Balancers**: Managed cloud providers solutions, F5
- ** Provisioning**: HashiCorp Terraform
- **Secrets Management**: HashiCorp Vault