PUBLISHING AND CONSUMING APIs SECURELY AT SCALE

Computacenter has provided DHCW with a secure, fault-tolerant & cost-optimised solution for their cloud-based Application Programming Interface (API) management needs which is now supporting 150 million API calls per year.

ABOUT THE CLIENT

NHS Wales is the publicly funded National Health Service of Wales employing 78,000 staff and providing healthcare to 3 million people with a key principle that good healthcare should be available to all, regardless of wealth.

Digital Health and Care Wales ("DHCW") is a Special Health Authority within NHS Wales. Created in 2021 to progress the digital transformation in health and care in Wales, DHCW makes services more accessible and sustainable. It supports personal health and well-being including the expansion of the digital patient record and improving the way data is collected, shared, and used.

TECHNOLOGY IN SCOPE

- Google Cloud Platform (GCP)
- Google Cloud Armor
- Apigee X
- Azure AD
- Terraform

SERVICES DELIVERED

- **TRANSFORM:** Cloud Platform Strategy, Cloud Enterprise Foundations, Cloud Optimisation Services
- **MANAGE:** Cloud Engineering Support

OBJECTIVES

DHCW required a modern, secure & scalable API Management solution, enabling their Health Boards and Trusts and external service providers to connect to a national API service, to store & retrieve data such as patient health records and organisational information.

SOLUTION

DHCW chose Computacenter to design and deliver their API Management solution needs, which required the following services:

- Design and delivery of a multi-region enterprise scale landing zone. This required the onboarding of a Google Cloud Platform (GCP) Apigee X SaaS solution on a fully automated, highly available and secure multi-regional landing zone structure, including centralised connectivity, management, and identity services.
- Using our Landing Zone service, and working closely with the customer teams, we used purpose-built Terraform scripts to deploy folders and projects as per the agreed resource hierarchy, with organisational security policies, a shared VPC structure, and HA VPN tunnels for Apigee X provisioning with connectivity to backend legacy services hosted on-premise.
- Working with our Apigee delivery partner, we also supported the customer's teams with the onboarding of the GCP platform, the Apigee X software, initial API development, and the provision of ongoing support.
- Acceleration of delivery using Infrastructure as Code and pre-built agile artefacts. Reselling & billing support was also delivered.

DELIVERED OUTCOME

- A highly secure, CIS compliant architecture, with policy-based guardrails for onboarding workloads, and with data encryption delivered via Cloud KMS.
- A fault-tolerant and cost-optimised solution built to support 150 million API calls per year, and a solution which is compliant with DHCWs API Strategy and architecture for the enterprise.
- Centralised operations, including integration with Azure AD for centralised Identity and IAM, centralised cloud operations for monitoring and logging, and a shared Virtual Private Cloud (VPC) architecture with VPC peering to Apigee X projects.
- Automated delivery remotely deployed and managed via Terraform Infrastructure as Code (IaC) for a project factory approach, and CI/CD pipeline for APIs.
- We worked with DHCW on a change request to the original contract to accommodate Cloud Armor (a network security service) into the environment, and to manage the consumption and billing process.
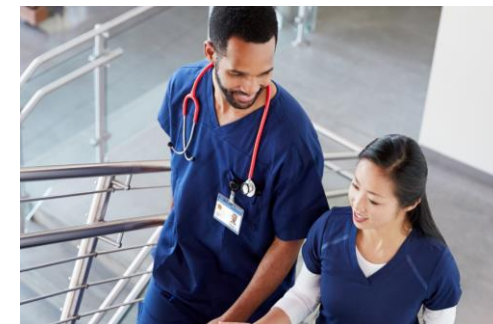
"We built on an already established and trusted partnership with DHCW in delivering technology sourcing and associated professional services. The success of previous engagements added to the confidence in choosing Computacenter to source and build the GCP platform."

Chris Parker
Account Manager, Public Sector Wales, Computacenter