



Fulton Hogan unlocks enterprise data warehouse automation with Azure DevOps

Background

Founded by Jules Fulton and Bob Hogan in 1933, Fulton Hogan has grown to become an engineering powerhouse with 8,000 plus people across New Zealand, Australia and South Pacific. The family owned business delivers infrastructure projects, products and services across roading, rail, ports, airports, water, energy, construction and more.



Azure DevOps is a complex system. We realised the Equinox IT approach worked when we decided to stand up a new environment. We made the few code changes, 'pushed the button', and a whole new environment was deployed. Just like that. Then we tore the environment down and stood it up again, just for fun!

Mark Ogilvie, EDW architect, Fulton Hogan

Challenge

Fulton Hogan process vast volumes of data across numerous engineering and physical infrastructure projects. They were developing a new enterprise data warehouse in Microsoft Azure to provide essential information for critical and urgent infrastructure service projects across two large cities. Any delays were directly impacting on city businesses and residents; fast delivery was required.

The Fulton Hogan team, while experienced in data warehousing, were relatively new to cloud, DevOps and automation. Manual provisioning and deployment was proving too slow for these projects.

They had started to use Azure DevOps but were not fully realising its potential. Fulton Hogan's Enterprise Data Warehouse team needed new ways of working and automated approaches for their build, deploy and test activities to enable rapid delivery of value to projects.

Work

The Fulton Hogan team had deep enterprise data warehouse expertise and looked to Microsoft Gold Partner Equinox IT to provide specialist skills for optimising their cloud strategy and product delivery approaches.

With Equinox IT's help, Fulton Hogan became more aware of DevOps and automated pipelines. Their team was trained on Azure DevOps and overcame technology and process roadblocks, establishing automated Continuous Integration/Continuous Deployment (CI/CD) pipelines across Azure and on-premises environments.

An automated infrastructure deployment with infrastructure as code using Azure Pipelines was created, allowing for commission and decommission of development, test and production environments using scripts and automation.

Fulton Hogan built an initial portion of the enterprise data warehouse solution in Azure, while tightening security controls across their code, environments and data.

Outcome

Fulton Hogan realised substantial improvements from the changes made, positioning them for continued infrastructure industry leadership. These outcomes included:

- 25% Azure cost savings by optimising development and test subscriptions, automatically shutting environments down at night and on weekends and scaling up and down based on demand.
- 40% automation of core enterprise data warehouse project development and deployment activities within Azure and Azure DevOps.
- Accelerated delivery for the two critical enterprise data warehouse projects with less manual effort, leading to faster restoration of essential city infrastructure services.
- Reduced release and deployment risk, and greater reliability and security across all aspects of the projects.

- Improved development productivity, culture and freedom, with more enablement for experimentation, optimisation, efficiency and transparency.

This was New Zealand's first projects to use Azure DevOps for enterprise data warehouse activities and take the new Azure Synapse service into production.

The team has become fully self-sufficient, independently managing build, deployment and cloud activities.

Microsoft Gold Partner Equinox IT helped Fulton Hogan deliver these outcomes using its Kickstart Cloud and Cloud Foundations services. Equinox IT won the Azure Innovate Award at the Microsoft New Zealand Partner Awards in 2020 for the work performed during this engagement.



Equinox IT's breadth and depth of skills was great to have on our project team. And the individuals were a pleasure to work with. Releases and deployments are now trivial, I can't imagine going back to the old way of working. Overall, I would recommend Equinox IT to anybody.

Mark Ogilvie, EDW architect, Fulton Hogan

Get in touch

Find out how we can help you accelerate delivery with automation and Azure DevOps.