

# How PREP Design used Infrastructure as Code to dramatically speed rollouts



## Executive Summary

PREP Design has helped manufacturers, designers and stakeholders dramatically improve the recyclability of their packaging designs. Central to this effort is their Packaging Recyclability Evaluation Portal (or PREP), a web-based software product that is hosted on AWS.

Fitzroy IT is PREP Design's trusted Software Development and AWS Infrastructure partner. This collaboration, allows PREP Design to focus on their world-leading recycling solutions, knowing that their technology will be performant, efficient, and reliable.

PREP is regularly rolled out to new jurisdictions around the world, each with their own unique legislation and requirements for recyclability.

When PREP Design needed to make the rollout process more efficient, Fitzroy IT worked with them to implement Infrastructure-as-Code using AWS CloudFormation.

## Customer Challenge

PREP Design needed a better way to rollout their software and infrastructure to new regions around the world. Their methodology was manual, time-consuming, and prone to human error.

## Fitzroy IT – The Perfect Partner

PREP Design chose to engage with Fitzroy IT because they have proven experience in managing a large web-based software portal and using Infrastructure-as-Code to repeatedly build AWS Infrastructure. The project required broad experience across AWS Infrastructure Management, Infrastructure-as-Code, Systems Administration and Software Development. Such diverse skills are rarely found in one place, but Fitzroy IT prides itself on the breadth and depth of its knowledge and expertise.

## Why AWS

Choosing AWS was a straightforward business and technology decision for PREP Design. Its global network is unmatched, and AWS had availability zones in all the regions that PREP Design were selling into. Crucially, it also provided the foundations for GDPR-compliance in those regions. PREP Design also determined that no other provider could meet their needs for bandwidth, performance, high availability, and cost efficiency.

## The Solution

PREP Design were already utilising numerous AWS Services in order to deliver the PREP Platform: AWS CodeBuild drives a CI/CD pipeline which deploys code via AWS Elastic Beanstalk to multiple environments.

Thus the logical choice for rolling out new copies of the PREP environment in an automated fashion was AWS CloudFormation.

Fitzroy IT analysed PREP's different regional setups, identified the variables between them and then implemented CloudFormation templates and documented the new rollout process.

## About PREP Design



**PREP Design's Packaging Recyclability Evaluation Portal is a simulation tool to determine the recyclability of product packaging. Several major Australian companies, including Nestle and Coles, have adopted it to ensure the environmental sustainability of their packaging going forward.**

## Results and Benefits

Rolling out Infrastructure-as-Code with AWS CloudFormation has made a quantifiable difference to PREP Design's new region rollout process.

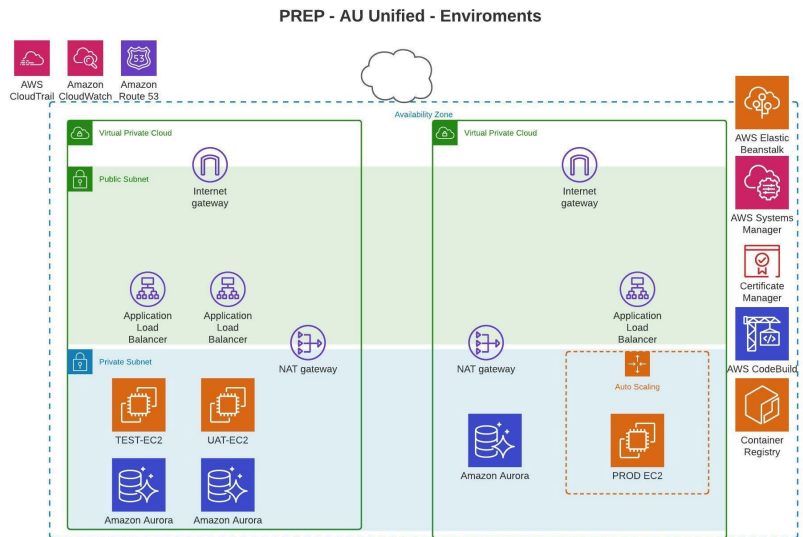
The time and cost of setting up a new region has been reduced by 80%.

In addition, because the rollout process is now fully automated and fully reproducible, setup errors have been eliminated.

## Next Steps

With this new Infrastructure-as-Code implementation in-place, PREP Design is looking forward to selling into new regions on a regular basis. And with the success of this project, PREP Design is looking at further improvements including:

- Adding automated testing to the CI/CD pipeline
- Enabling SSO to streamline the login process



*Fitzroy IT have been our trusted partner for Software Development and managing our deployments to AWS for several years.*

*The Fitzroy IT has been an integral part of the success of the PREP platform. Their recent effort to automate the rollout of the platform to new regions has led to substantial improvements in the process. They are a knowledgeable and professional team, and we look forward to continuing the partnership in the future.*

**Anthony Peyton**  
CEO  
PREP Design

## About Fitzroy IT

Fitzroy IT are AWS partners with a team of Certified AWS engineers with extensive industry experience.

Whatever you need we can help. Our experts can assist with Infrastructure, Migrations, DevOps, Well-Architected Reviews, Ongoing Support and Software Development. We can even educate and upskill your staff.

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