

Modernize and Scale on AWS



Executive Summary

MetService, Te Ratonga Tirorangi, is New Zealand's national weather authority. MetService required a partner to remediate its AWS tenancy after a “lift and shift” and scope and deliver a phased modernization programme, analysis across over 300 applications (in 45 AWS accounts). A modernization strategy, in order to “take out” aging dependencies and save on license fees,

Customer Challenges

MetService helps citizens stay safe and make informed decision based on the weather. During 2023 Aotearoa has experienced several extreme weather events, including Floods in Auckland and Hawkes Bay.

In order to provide a higher level of information at the right time to New Zealanders during this changeable and difficult time, MetService is undertaking modernization and improvement for their AWS operating environment.

Why AWS

Scaling by millions of requests, migrate into Cloud

MetService was already established on AWS tenancy after a “lift and shift” due to moving core services from Kelburn to AWS.

Why Koan

MetService chose Koan due to our experience in being a “development partner” that can “learn MetService’s environment and applications”, enabling us to “understand the customer”. Our discovery process was described as “being like therapy” to help understand problems and simplify technical debt. This included a stocktake from the applications perspective of over 300 applications.

About MetService



Meteorological Service of New Zealand Limited is the national meteorological service of New Zealand.

MetService help people stay safe and make informed decisions, based on the weather.

Commercially, MetService deliver scientific insights and solutions that give local and international businesses a competitive edge in the transport, energy, media, resources, industry, infrastructure and retail sectors.

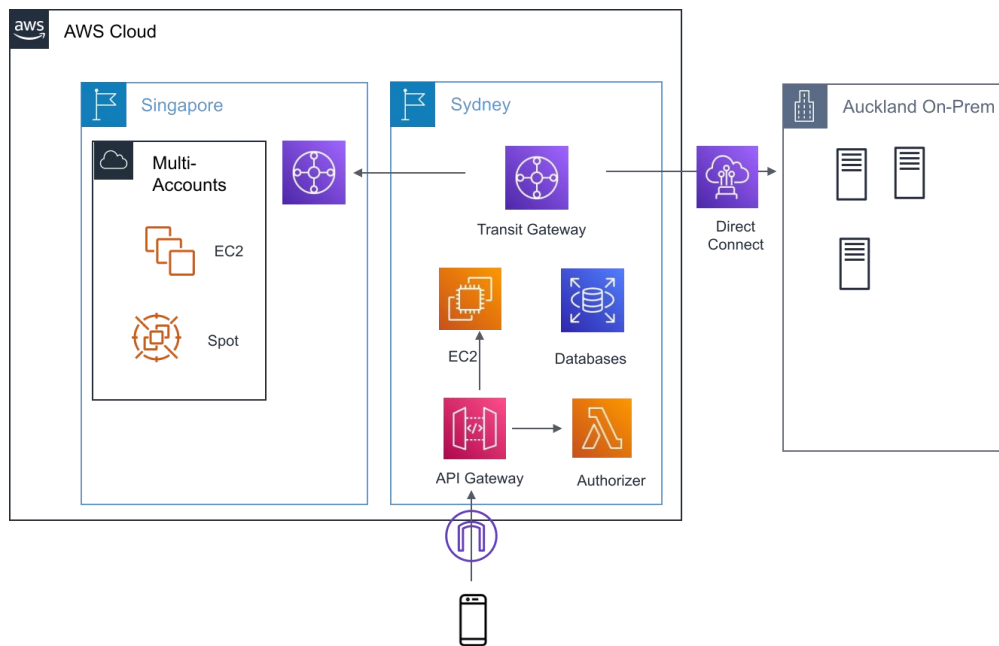
Partner Solution

Modernization Phase 1 used API Gateway to replace technical debt, and “out of support” from alternative gateway products to API Gateway. Route 53 and DNS records, API Keys were migrated into AWS. Deployments

Modernization Phase 2 involved extracting “Mulesoft”, moving Java code in ECS containers, and rewriting code in Node.js / NEST / Lambda as appropriate,

Infrastructure as Code was used (CDK) along with Github Actions for code pipelines in order to give 100% release automation.

Architecture



Results and Benefits

MetService 1.2M license fees over 3 years. Failover for Aviation API from “on-prem” data center was implemented using AWS tools in Sydney. API Gateway is now in place for all traffic, and

Next Steps

Koan will proceed with a funded AWS assess phase, in order to consolidate data centers. Hand over and operationalization, and next steps along the modernization journey

About Koan

Koan is a global AWS and software development consultancy based in Wellington, New Zealand. Koan has been building and deploying secure, compliant, enterprise applications for Global customers for 20 years. Koan is an AWS Advanced Tier Partner providing AWS Certified resources for DevSecOps AWS Migrations, Modernizations, Data / ML / AI.

