

Accelerating Cloud Capability

Case Study



MECHANICAL
ROCK

The Challenge

In order to drive digital innovation and agility, our Client - a leading Perth resources company - embarked on a 'cloud native' digital transformation.

A cloud native approach means applications and infrastructure are designed to take full advantage of the scalable and flexible nature of the cloud. Cloud native solutions leverage managed services and flexible compute to minimise operating costs, reduce the time to production and to free-up developer time for value adding tasks.

However, building cloud systems is hard and scaling this across an enterprise is harder still.

How do you enable different teams, at different levels of cloud maturity, to innovate in the cloud?

How do you keep data and systems secure?

How do you onboard new teams quickly and make them productive?



The Solution

Mechanical Rock developed our Cloud Native Factory (CNF) to allow autonomous agile teams to easily build secure and reliable cloud native applications.

The CNF encourages teams to leverage common architectural patterns.

Patterns are stored in a master portfolio and distributed to local portfolios hosted in separate accounts – making workloads portable and reducing risk by limiting blast radius.

Pattern development is democratized: teams that develop new patterns can contribute them back to the master portfolio to be reviewed and shared with the wider group – enabling reuse and improvement – and avoiding the bottleneck of a central team.

This encourages teams to experiment with new and innovative cloud services, protected by strong guardrails which limit the risk and costs involved.

The Cloud Native Factory features:



Team setup complete within 2 hours.



Shared patterns which encourage collaboration and reusability.



DevSecOps making security proactive, not reactive.



Zero to a working application in 7 days, including infrastructure.

The Solution

Enterprise DevOps at Scale

The Cloud Native Factory enables developers to build applications that are secure and scalable.

Providing approved patterns and automated pipelines enables developers to quickly and easily provision new development environments – which makes it easy for teams to adopt continuous delivery and to rapidly and repeatedly deliver value.

Secure-By-Design

Using a ‘secure-by-design’ approach, best-of-breed practices are built into patterns which are immediately available to all teams.

Launch constraints are applied, allowing users to provision resources, but only in approved configurations. Within these guardrails developers are free to innovate with new services and technologies.

Single-Pane-Of-Glass Compliance

Products published to the master portfolio are reviewed and must include a suite of compliance tests.

The “compliance-as-code” approach ensures tests are run every time a change is deployed to a workload and results are aggregated to provide a single view of compliance across the enterprise.



The Solution

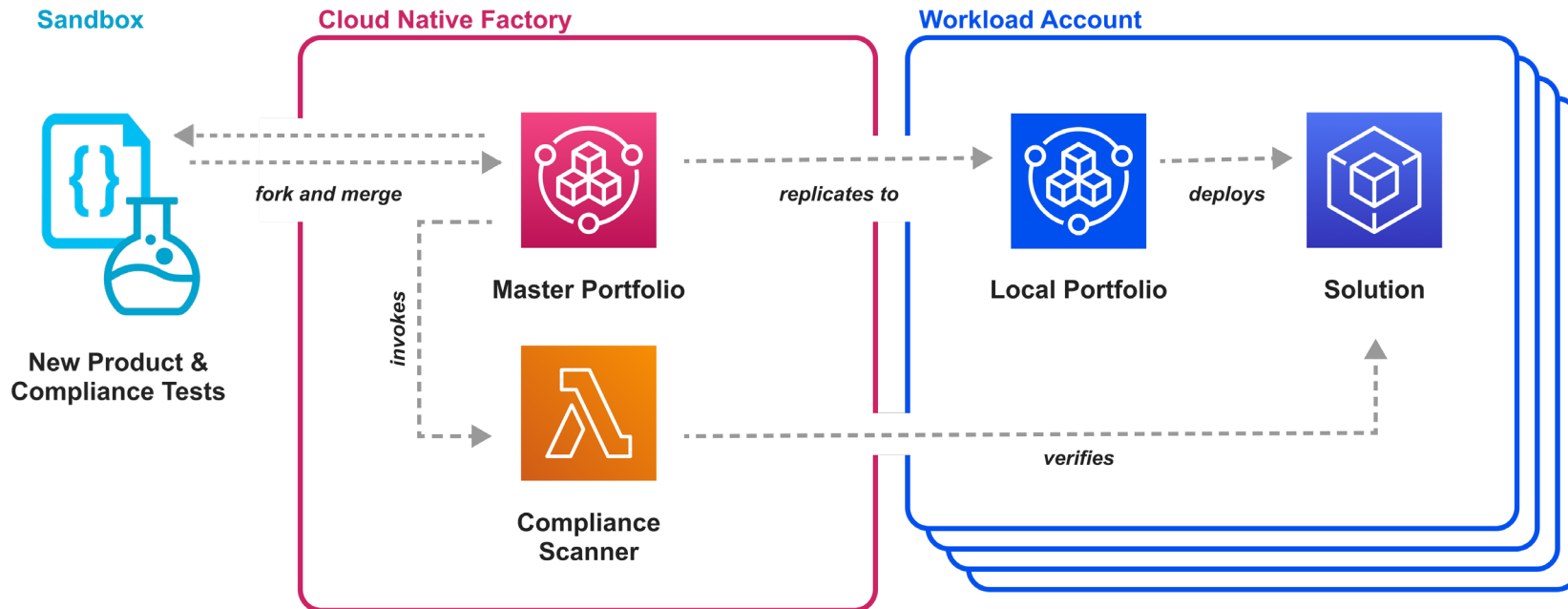


Image: A conceptual diagram of how compliance and product development work in the Cloud Native Factory

Adoption

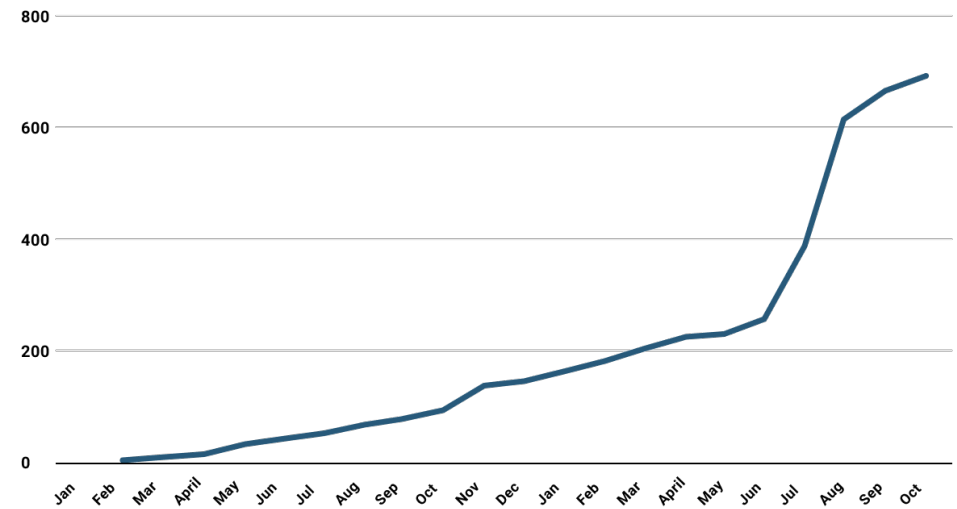
The Cloud Native Factory has been live with our Client for more than a year.

In this time, usage has scaled from a few teams with a handful of products to twenty teams running more than 700 cloud products.

In that time, many of the teams have been able to move from lengthy change cycles to multiple deployments per day.

Also, dozens of existing security risks have been identified and resolved by applying compliance patterns to existing cloud workloads.

Active Products Over Time



Sustainable Growth

To be successful, a cloud adoption must ensure leading edge practices can be adopted by all teams with relative ease.

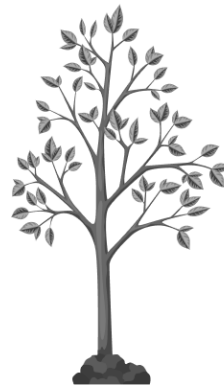
This requires a balance of platform services (to enable adoption), advice (to increase cloud maturity) and audit (to maintain security and compliance).

Planting the seeds of a collaborative ecosystem ensures that cloud services become an enabling technology for the whole enterprise.



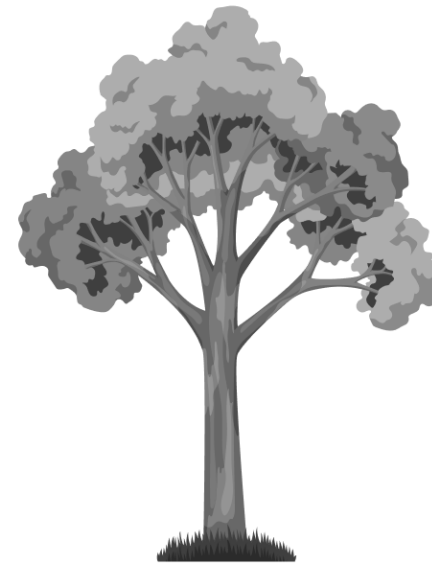
Standardisation

- Active guidance
- Preset templates & patterns
- Centralised authority



Evolution

- Some guidance
- Teams contribute patterns
- Increased collaboration



Autonomy

- Recurring issues codified
- Compliance-as-code
- Distributed assurance model



Need better compliance and flexibility from your cloud?

Get in touch so we can chat about your plans over a coffee

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