THE CHALLENGE

As Google Cloud adoption increases and enterprises continue to deploy workloads, business lines and individual project teams start onboarding workloads. With Google's strong portfolio of managed data services customers are looking to leverage these to address challenges such as database migration, data warehousing, reporting and analytics, ETL and AI/ML, to name just a few.

By using only fully managed cloud platform services, organisations may wish to adopt these rapidly with minimal take-on time to start ingesting, transforming and processing data sources they already have on premise or resident in other public or private clouds to gain the value the GCP services bring. Without the need to provision custom infrastructure resources (such as virtual machines) an organisation may understandably feel this reduces the requirements of common operational support elements such as patching and backup and GCP adoption can therefore be expedited.

However the consumption of such services still mandates the key elements of any foundational cloud platform. Network connectivity needs to be In place, data ingested and stored in GCP needs to be secured, user access and authentication need to be governed, spend need to be managed, and the ability to segregate workloads between individual business lines and projects is necessary. In conclusion even if an organisation only wants to use cloud native services, there is still a need to apply the best practice foundational controls.

OUR APPROACH

At Computacenter we have addressed this requirement with the creation of a 'Serverless Foundation' landing zone model. This approach is built from our experience of building enterprise grade GCP Landing Zones for our customers and is designed to provide embedded foundations services for cloud native managed services with rapid uptake.

Our centralised core platform design enables a segregated GCP resource model, to securely onboard separate teams and projects with organisational level policies and controls. Identity can be federated via a customers existing Active Directory with both Single Sign On (SSO) and permission driven access to services. Other key foundational elements form part of the platform such as billing, labelling, data management, monitoring/logging/alerting and automation. Further more the serverless foundations platform uses secure access boundaries between GCP and on-premise with traffic routed only across Google's network backbone. This greatly increases security posture by reducing the surface attack area.

Such an approach ensures that an organisation can rapidly adopt a foundations platform to only consume native cloud services whilst ensuring the key foundational pillars are in place. This allows a customer to start building out GCP data services and solutions from development through to production with a high level of confidence. If in the future a customer wishes to begin consuming IaaS services and/or require secure internet based access, this can easily be achieved by layering on the platform elements required to enable these components, and because the foundations approach is modularised, scripted and deployed automatically this can be extended simply and rapidly. Our designs are fully CIS compliant, so customers can be confident that security is embedded throughout.

We understand and appreciate that customers may differ by tools and processes. Therefore, our skilled, accredited and experienced consultants work consultatively with customers to deliver our Foundations platform or use bespoke consultancy to advise on how to migrate a similar service.

SERVERLESS LANDING ZONES

Computacenter has a suite of Google Cloud professional services that provide customers with GCP expertise and experience to review, build, evolve and integrate a customers GCP environment. We include Serverless platforms in our Cloud Operations Review, as well as help implement Serverless Foundations as a customer option within our GCP Foundations (Landing Zone) service.

Foundations (Landing Zone) Service | Cloud Operations Review Service | Cost Optimisation Service | Bespoke Consultancy
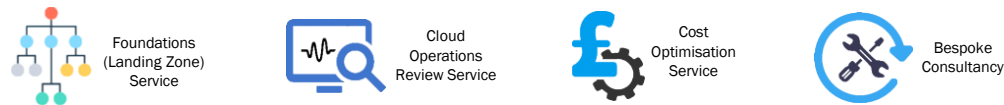
Our GCP Foundations applies Google best practice and applies the 10 foundational pillars that enable organisations to run their GCP workloads in a governed manner. We provide customers with 'tiered' service offerings that provide flexibility to onboard Google Cloud aligned to their particular needs and circumstance. Our tiers reflect the range of needs for dev and test use cases, through to enterprise production with operational integrations. We provide build automation using pre-built Infrastructure-as-Code modules, which can be managed via CI/CD pipelines, is fully CIS compliant, and is backed by a set of agile artefacts for project based deployment.

Our Foundations design includes a regional based connectivity hub, used to centralise all connectivity, management and operational services to your business & project teams. Connectivity to a customers on-premise environments can be accessed through Google backbone services both for user connectivity (using Identity Aware Proxy) and data centre services connectivity (using Private Service Connect). Once a foundations platform is in place we offer factory based services via Catalogues to allow rapid onboarding of consumers and resources into the model using standard scripts ensuring commonality between resource builds and therefore simplification of operational management, security compliance and centralised governance.