Marketplace for reusable cloud architectures

Self-service portal to deploy modern, secure and cost-optimized cloud architecture on-demand

SECTOR

Telecomunications

COMPETENCIES

Cloud Foundation

Cloud Migration

Data Architecture

SERVICE PROVIDER

Google Cloud

THE CHALLENGE

In today's fast-paced world, businesses need to be agile and quick to adapt to changing market conditions. In such a scenario the cloud providers and product vendors are trying to speed up the process by creating standard architectures and components that can be adopted to solve specific needs by following the providers' best practices. Such standard assets are usually complex to implement due to the huge number of variegated parts that compose the solutions. Moreover, implementing them without using automatisms can lead to misconfigurations, low maintainability, and loss of control. The challenge for one of **our Telco & Media clients** was to keep up with the **ever-changing cloud infrastructure requirements** and ensure that their cloud architectures always followed the **security best practices suggested by Google Cloud**. They faced difficulties in managing such complex cloud architecture while ensuring **configuration correctness and disaster recovery**. This was a time-consuming and expensive process that required constant monitoring and maintenance.

OUR SOLUTION

To address such challenges, **BIP xTech** developed a **self-service portal** containing **reusable Terraform templates** that implement the above-mentioned complex cloud architecture in **Google Cloud standards**. Such scripts provide a higher security level and help avoid misconfigurations thanks to additional tools like tfsec and checkov. This portal allowed our client to take advantage of all the benefits that come with the usage of **Infrastructure as Code (IaC)**, such as **configuration drift detection and disaster recovery**, by keeping the scripts secure and their maintenance low. Moreover, the adoption of IaC technologies enabled the governance of the modification of all the cloud-related configurations and the point-in-time recovery capability, making it possible to revert to a working configuration in seconds by simply executing a **Cloud Build** pipeline.

Automation scripts follow the best practices Google Cloud suggests using in IaC scenarios, ensuring the **whole architecture is always modern and up-to-date from a security perspective**. This included implementing security measures such as encryption, network isolation, and access controls.

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RESULTS

BIP xTech's self-service portal significantly **reduced the time-to-market and mitigated configuration drifts**. The client was able to quickly deploy new infrastructure and update the existing one with minimal effort and downtime. The portal also made it easier to enforce security policies and maintain compliance with industry standards. Moreover, our self-service portal increased **customers' cloud cost awareness**, by showing information about the costs related to each cloud architecture before the actual instantiation.

BENEFIT

Drift detection: Configuration drifts are detected and notified quickly

Disaster Recovery: Possibility to rapidly restore cloud configuration in case of disasters

High reusability: IaC templates can be used to extend the cloud architecture in several scenarios

Scalability: The templates are easy to extend to meet specific requirements

Standardization: The templates follow architectural best practices provided by Google Cloud

Cost optimization: The Client knows in advance the impact of each cloud architecture and can decide on the proper one based on the costs/benefits ratio

Contact us

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