Anonymized Case Study

Cloud Migration to GCP

To respect the privacy of our customer, we have kept this case study anonymous.
Our customer provides various online services related to hospitality internationally.

Our customer sought to:

- Migrate their infrastructure into Google Cloud Platform (GCP)
- Containerize their application workloads using GKE and AppEngine
- Give their application access to a fully-automated application platform
- Become 152-FZ compliant by building a separate infrastructure in StackGroup to store the data of their Russian customers

Requirements: Efficiency and Regional Compliance

Our customer maintains several interconnected but independently developed and managed applications that complement each other to digitize their industry. They needed a cloud infrastructure that could scale alongside their growing operations and respond efficiently to fluctuations in demand. They additionally wanted to automate as much of their infrastructure and application platform as possible in order to allow their technical teams to trust the health of the platform being used and focus on application development.

Our customer needed a technology stack that could auto-scale, auto-provision, and be auto-redundant to deliver stronger business value. They wanted to migrate their application away from AWS and into GCP, whose regions were better suited to their business' delivery model. They needed to be mindful of compliance requirements, especially 152-FZ, a set of Russian privacy laws that requires the data of Russian persons be stored in Russia. Our customer therefore needed a cloud native, multi-cloud solution to sustain their digital transformation.

Services: Cloud Assessment and Migration

Our customer sought to leverage CloudOps' professional services to meet the growing and diverse needs of their technology stacks, beginning with a DevOps Platform and Practices Assessment (DPPA) that gave visibility into the tools and practices being used. A combination of consulting services and project-based deliverables followed.

CloudOps migrated the customer's European infrastructure from AWS into GCP and leveraged Google Kubernetes Engine (GKE) to containerize workloads. CloudOps built a separate infrastructure in Russia to meet 152-FZ. Our customer was able to innovate their technology stacks in less time.

Containerization

Containerization can dramatically increase the scalability, speed, and portability of an application. Our customer used GKE to this end as it integrates well with Google Cloud Storage, identity management, and other GCP services. As the original managed Kubernetes service in the market, GKE is the most mature offering and includes many advanced features for container orchestration, such as the automated upgrade and autoscaling of worker nodes through the administration portal and integrated cloud service features. By leveraging CloudOps' expertise, our customer was able to access a containerized application platform above their GCP infrastructure.

Automation

CloudOps implemented extensive automation into the application platform, which it continues to manage for our customer. This allows them to focus more on their software development and less on routine operations. With over fifteen years of industry experience, CloudOps' technical teams have access to a collective library of automation recipes and playbooks with technologies such as Terraform and Ansible. This wealth of knowledge translated to an automated application platform using a set of core building blocks.

Compliance

Our customer has some operations in Russia. They are required to be compliant with 152-FZ, which mandates Russian data sovereignty for Russian individuals. Google Cloud Platform currently does not have a presence in Russia, nor do any other public cloud providers. Our customer therefore needed to augment their infrastructure in GCP with an on-prem solution hosted in Russia to manage all data specific to their Russian clients.

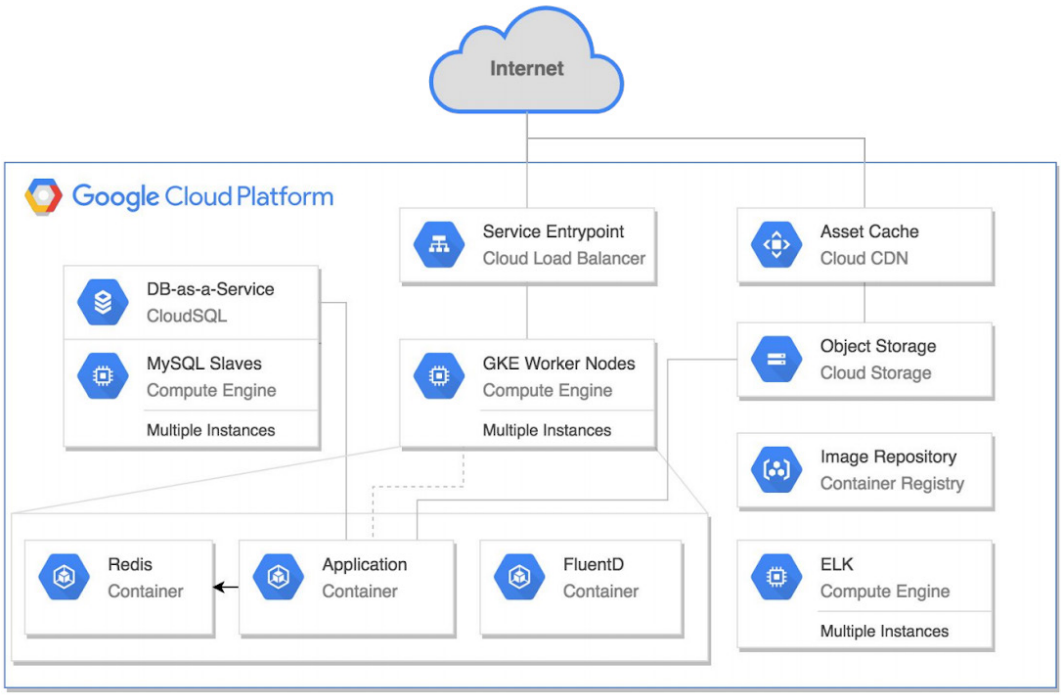
CloudOps helped the customer leverage the services of StackGroup, a VMWare, CloudDirector-based provider that has a fully 152-FZ compliant environment in Russia. The geographic distance between the servers and our team caused timeouts and unreliable states, which CloudOps responded by manually automating integrations. This permitted our customer to manage the data of their Russian customers alongside that of other customers, remaining 152-FZ compliant.

Security

CloudOps' services are SOC 2 certified, meaning we understand the importance of security both for regulatory reasons and operational health. CloudOps was able to build a technology stack that has container security best practices ingrained into DevOps processes.

Result:

Our customer was able to relaunch their cloud infrastructure in GCP. Their architecture can be seen in this diagram.



By leveraging CloudOps' services, our customer was able to navigate the increasingly complex ecosystem of open source and cloud native tools and projects. They migrated their applications away from AWS and into GCP, containerized their workloads, implemented automation, and found a solution to retain data sovereignty for their Russian customers. They were able to increase the efficiency of the application platform, allowing their technical teams to focus on application development.

Click here to learn more about how CloudOps can help you build and execute a cloud migration strategy that will modernize your application.

Contact us to find out if your organization is eligible for a free cloud migration.

With over fifteen years of experience working with open source, cloud platforms, networking, and DevOps, **CloudOps** is in a unique position to help businesses thrive in today's data-driven software economy. We help businesses successfully adopt and operate cloud platforms, taking advantage of self-service, utility economics and the API-automated, continuous delivery of IT. As a member of the Cloud Native Computing Foundation (CNCF) and the Linux Foundation Networking (LFN), CloudOps is actively involved in open source communities. CloudOps is also a Kubernetes Certified Service Provider (KCSP) and a Kubernetes Training Partner (KTP), providing consulting, training, and managed services for cloud native and DevOps practices and deployments.