Dynamic, cost optimized deployments of analytics products on GCP

GS Lab | GAVS was an engineering partner for Cambridge Semantics Inc. (CSI)

The challenge
CSI has many dynamic components such as Anzo Agent, AnzoGraph, Anzo Unstructured which are used for data analytics. Each component needed its own static deployment with infrastructure planning, costs, optimization, security hassles, and monitoring hurdles. CSI wanted dynamic component deployment from Anzo's User Interface, saving significant effort and costs for the end customer.

The solution
GS Lab | GAVS partnered with CSI to design Kubernetes Operators – tiny pods that run in a k8s namespace and control the deployment of the product instances. The custom resource definitions(CRDs) are deployed on GKE and can be used to deploy the component with desired configuration. The CRD parameters can be used to specify details about container registry, persistent disks, load balancers, etc.

The result
The end customer can deploy the components directly from the UI (or from the Kubernetes cluster). They can run multiple components only when needed. The infrastructure gets deployed and then torn down when not in use. There is no wastage of resources.

> There is tremendous product and infrastructure cost savings for the Anzo customers. The Anzo customers do not have to buy multiple products from different vendors. All CSI components in an Anzo solution are licensed through the Anzo licensing manager covering CSI product components dynamically when they are in use. This benefits end customers who do not need to deploy all components all the time.

About Cambridge Semantics Inc.
Cambridge Semantics Inc. (CSI) is a modern data management and enterprise analytics software company. Their product Anzo (utilizing AnzoGraph) is the most complete, scalable, and powerful knowledge graph platform. Anzo quickly transforms siloed data into highly connected knowledge graphs.
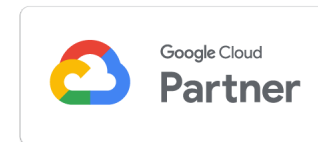
Vertical/horizontal solution: Software & Internet

Primary project location: United States

About GAVS Technologies Private Limited
GS Lab | GAVS offers digital product engineering, AI-led managed services, and digital transformation services to the customers across the globe.

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