

## Hornbach: Stabilizing the Webshop with Google ASM

freiheit.com's mission was to roll out Anthos, including the migration of existing network policies, implementing continuous integration/deployment, debugging Istio and network issues, and ensuring a successful and smooth project implementation.

### The challenge

The Webshop suffered from traffic routed to unhealthy nodes leading to severe and non recoverable package loss. The reasons were incompatibilities between NetworkPolicies and the used Container Network Interface. Moreover, the management of NetworkPolicies were limited and based on IPs. The challenge was to replace the existing NetworkPolicy setup and avoid traffic being routed to unhealthy nodes.

### The solution

Implementing Istio via Anthos Service Mesh (ASM) avoided routing to unhealthy nodes. ASM's managed Istio simplified deployment, running, and updates. It allowed replacing ~200 IP-based NetworkPolicies with AuthorizationPolicies using URLs, namespaces, and service accounts. The rollout and migration occurred stage by stage, namespace by namespace.

### The result

Hornbach's webshop now runs smoothly on GKE with network traffic via ASM. IP-based NetworkPolicies were replaced with AuthorizationPolicies, securing traffic via mTLS and dedicated service accounts. Policy creation was automated using templates and a CD pipeline. A test library was implemented for setup and rule testing. Monitoring and logging allow for dry-run observation of new policies.

Using Google's ASM, Hornbach and freiheit.com were able to replace the current GKE networking setup, thereby stabilizing, increasing security and simplifying the network communication and setup of authorization rules, allowing Hornbach to run their WebShop on GKE with confidence.



### About HORNBACH Baumarkt AG

About HORNBACH Baumarkt AG  
The HORNBACH Group is one of Europe's largest operators of DIY megastores with garden centers. As the only publicly listed, family-run company in the DIY sector, HORNBACH can look back on a company history spanning five generations.

**Vertical/horizontal solution:**  
Retail & Wholesale

**Primary project location:**  
Germany



### About freiheit.com technologies gmbh

freiheit.com builds large-scale software projects across markets and verticals, from ecommerce to healthcare.



### Products

Google Cloud Platform