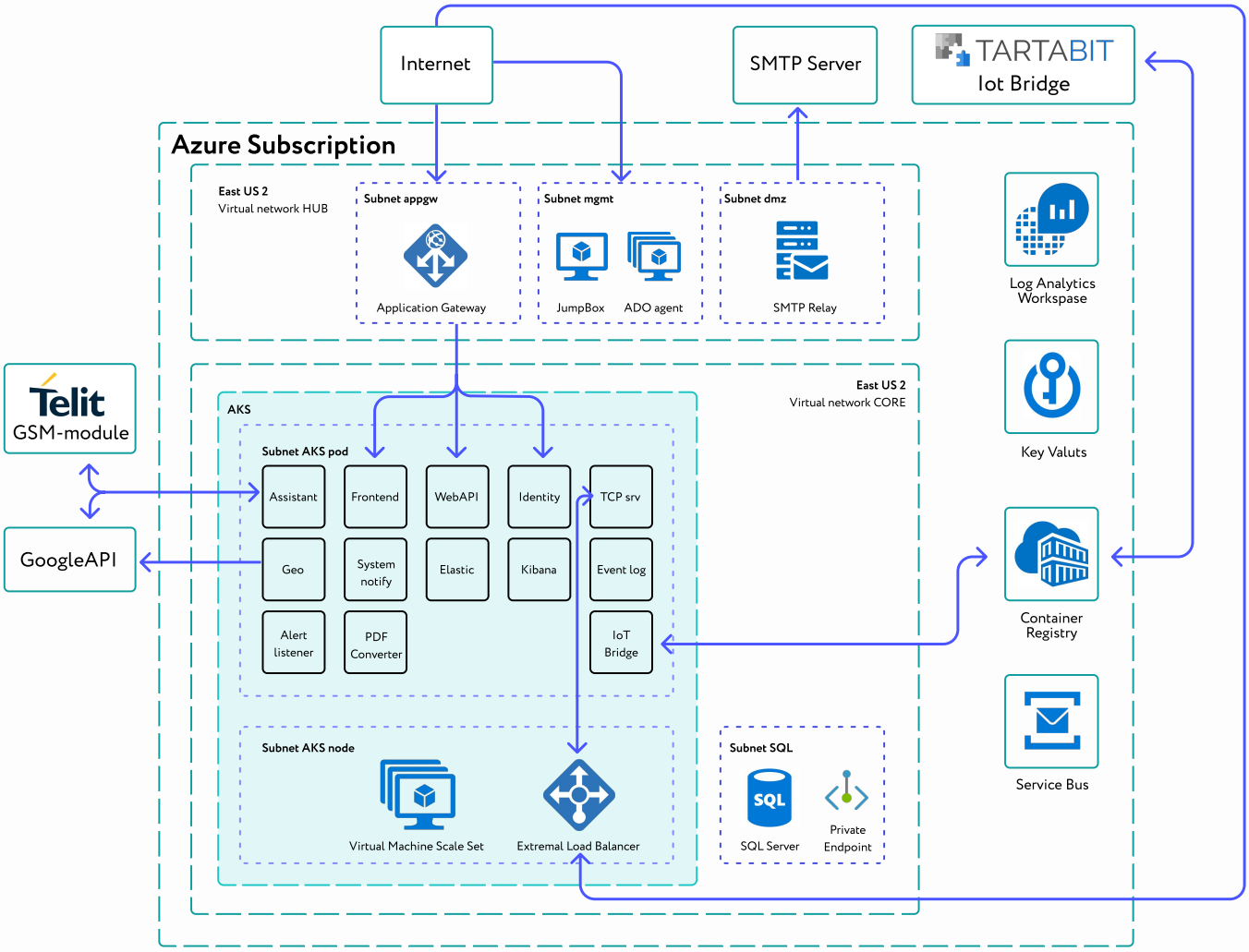
PRODUCT SCALING: BREACH DETECTION SYSTEM FOR SHIPPING CONTAINERS

Datasheet

PROVIDING SOLUTIONS FOR TOMORROW – SINCE 1993

Project objective

Create a flexible and secure platform for smooth operation of the shipping container monitoring product – powering a vast network of IoT devices deployed globally – under fluctuating loads. This would help the client enter key global markets and handle growing demand. Tight deadlines were a top priority, driven by the product's active use and partner commitments.



Result

Elastic, resilient, and highly secure shipping container monitoring service is capable of scaling seamlessly to accommodate an influx of users and track widely distributed objects. PSA leverages best DevOps practices to establish a cloud-based platform from scratch in just 30 days to maintain client deadlines. The product can be freely promoted to port authorities and global shippers to protect cargo on international voyages.

Scope of work

- New infrastructure development and deployment. Building Kubernetes cluster in the Azure cloud to meet global deployment, automatic scaling, client-server flexibility, high availability, and enhanced security
- CI/CD development and implementation utilizing YAML pipelines to store pipeline logic as a code. Automation of building and deploying already existing components in the absence of data
- Infrastructure and development process security enhancements. Implementation of private endpoints, incoming traffic and infrastructure management protection, role-based access, and regular updates for VM and OS
- On-prem to cloud infrastructure migration with downtime of up to 30 minutes while keeping the system operating
- System health evaluation, handling network, communication, and server failures. Continuous infrastructure enhancement

Activities

- Cloud Infrastructure Development
- CI/CD Pipeline Implementation
- Infrastructure Migration
- Vulnerability Testing
- Ongoing Support

About the project

Technologies

- Azure Kubernetes Service
- SQL Databases
- Application Gateway
- Service Bus
- Key Vault
- Storage Account
- Virtual Machine and Scale set
- PowerShell
- Kubernetes YAML
- Trivy
- Tartabit
- Telit

Project size

- 1 DevOps Engineer

Duration

2+ years

Platform

- Azure Cloud
- Azure DevOps