

Sterna INTEGEM

Secure and Monitored Petroleum Transports



About Sterna

- Sterna is a Singapore (www.sterna.sg) based company that develops, manufactures and distributes Cloud-based security products and monitoring devices for market segments like the Telecom, Petroleum, Utility, Transport, Finance, Medical, Defense and Governmental. We also distribute products for smart and efficient meetings.
- Our main products are all managed and controlled via The Cloud with 24/7 status in real time and all event data is collected centrally:
 - Sterna RIKE, Electronic Locks to IP-rated steel cabinets.
 - Sterna MONIT, Monitored Padlocks and Transport Monitoring Systems.
 - Sterna KIMS, Key Management Systems and Deposit Boxes.
 - ALTERO, Reading mechanical utility meters (www.altero.com).

We also represent EVOKO, Meeting room products. (www.evoko.se)

Current Status of Sterna

- Sterna RIKE electronic motor locks have been installed in over 250,000 telecom sites and is operating in one on-line Cloud based system in the Indian telecom market controlling the IP-rated steel cabinets in base stations eliminating battery theft and monitoring service staff performance.
- Sterna MONIT Padlocks are being implemented when we upgrade the existing 8,000 petrol trucks that already are using our system. These trucks are now being upgraded to our new INTERGRA system, which ensures that the tank trucks can only be opened by an authorized person in a certain geographical area.
- Sterna KIMS Key Management Systems and Deposit boxes are being developed to the next generation introducing cloud based monitoring.
- Altero MeterCam readers are going through POC's (Proof Of Concept) projects on mechanical gas and water meters in several markets.
- EVOKO is a market leader in modern meeting management products with an extensive international reference list.

Sterna INTEGEM

Integrated Management System for Petroleum Transports



Sterna INTEGEM is a solution integrating various components of the delivery system, with the objective to secure and monitor the complete transport cycle. Sterna INTEGEM integrates the Abloy CLIQ Padlock electronic locking system with other operative components, such as vehicle tracking system, ERP systems, location validation systems, employee validation systems and other operational components.

The holistic nature of the integrated view provides room for better decision making in monitoring the delivery process.

Abloy Components



Abloy CLIQ Electronic Padlock

Abloy PL340 Padlocks with CLIQ technology and dust cover



Abloy CLIQ Connect keys

CLIQ connect keys



Abloy CWM system – (CLIQ Web Manager)

In house installation of the CWM system



Abloy Wall PD – (Programming Device)

Connected to wall-pd for local authorization

Components connected



ERP System



Google Maps



Abloy CLIQ
Connect



Driver identity
system

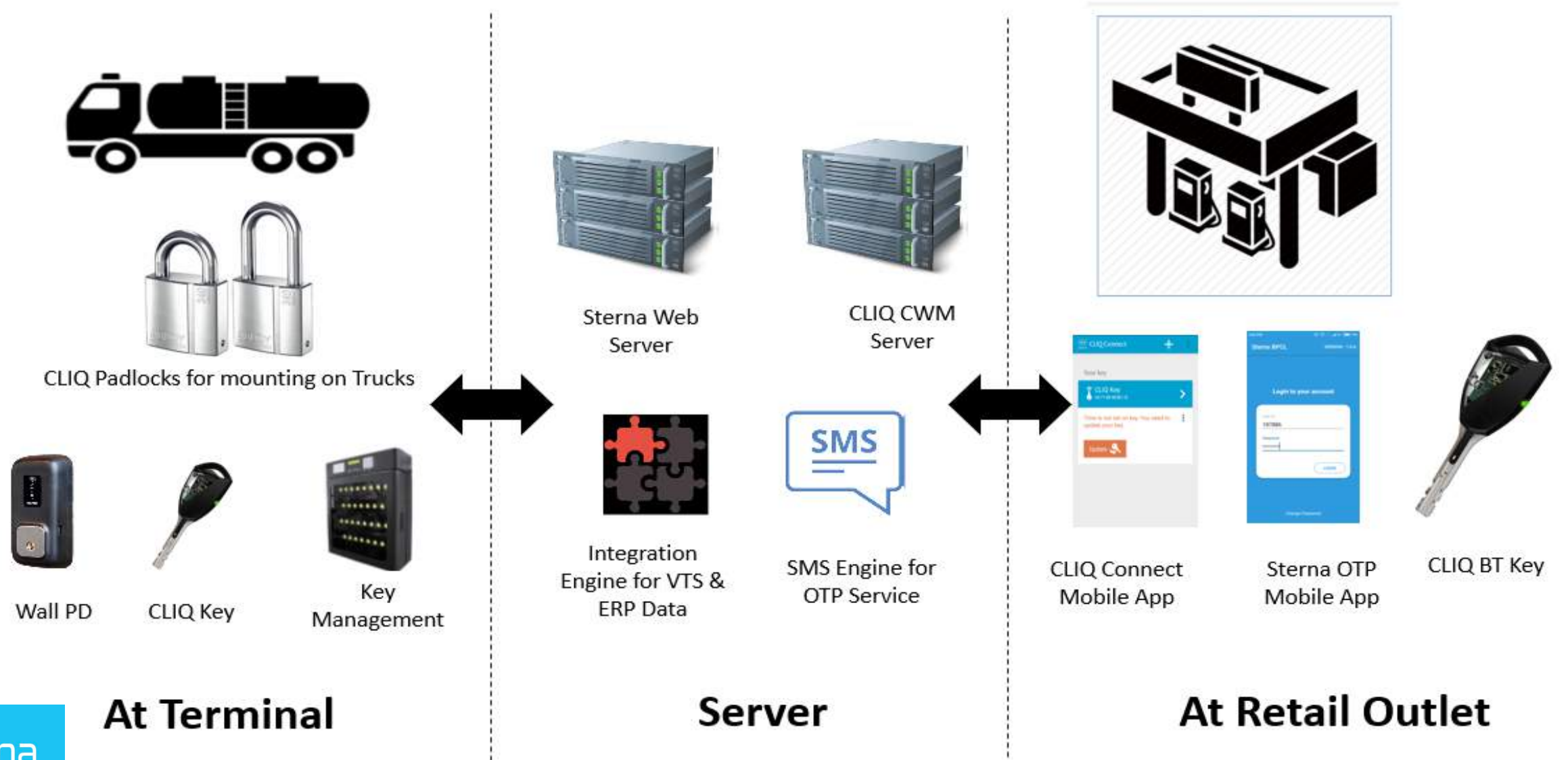


BLE Beacon



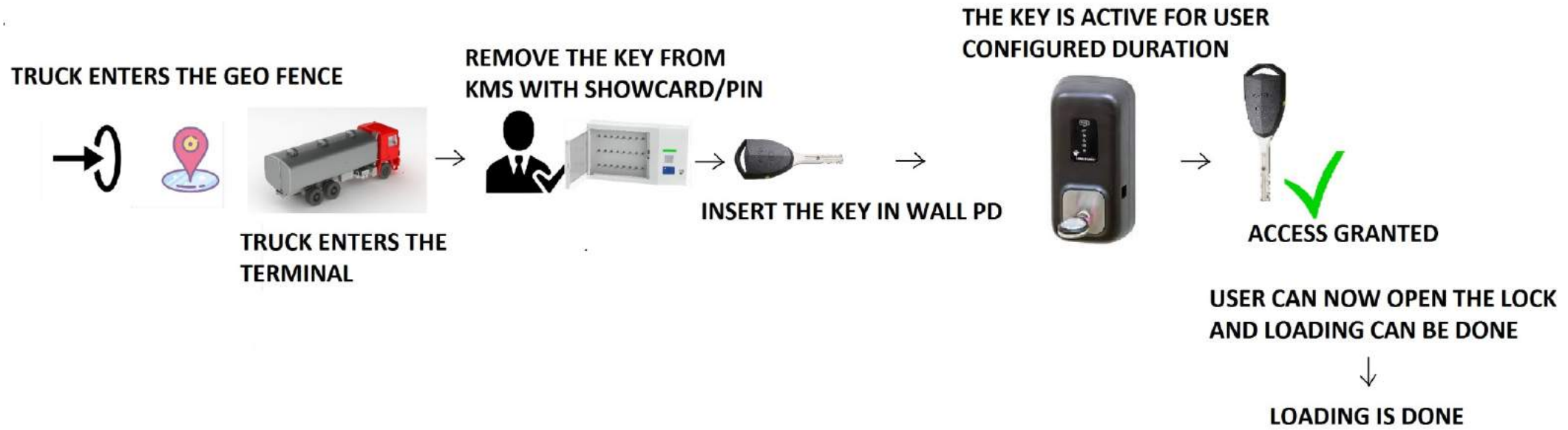
Other Apps
used.

Component allocation

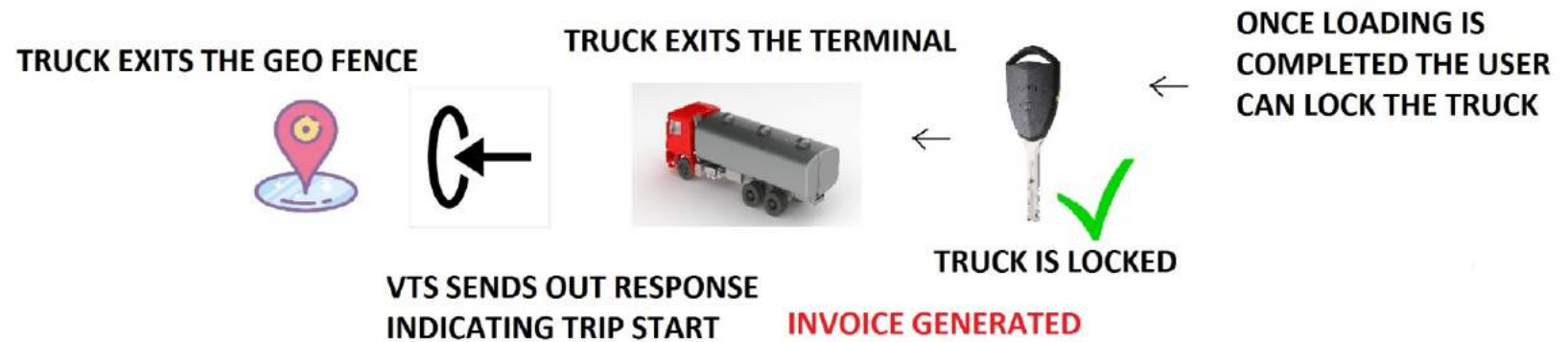


OPERATION PROCESS AT THE LOADING AREA OF THE TERMINAL



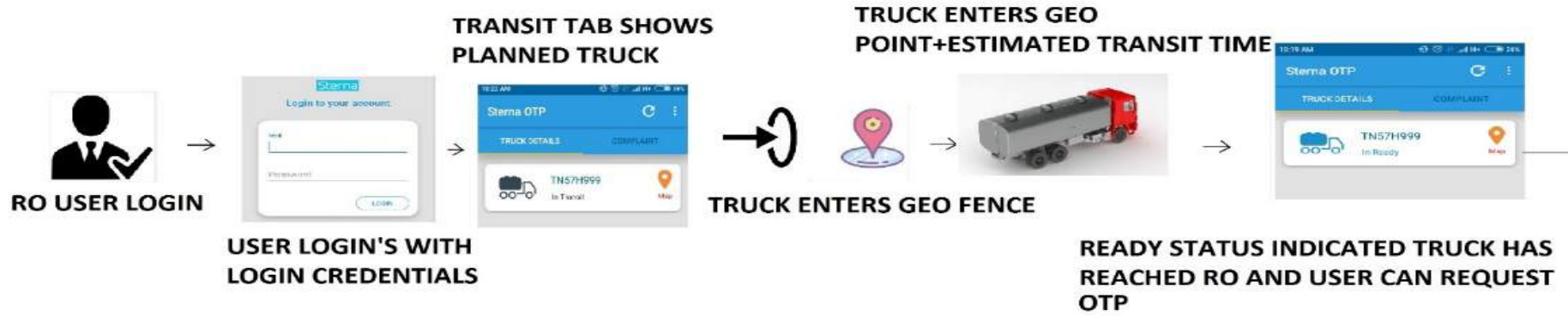


TERMINAL OPERATIONAL FLOW

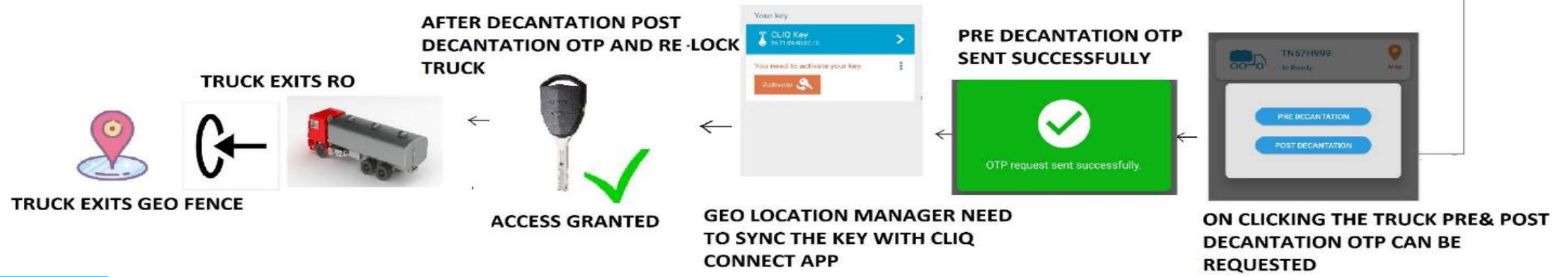


OPERATIONAL PROCESS AT RETAIL OUTLET



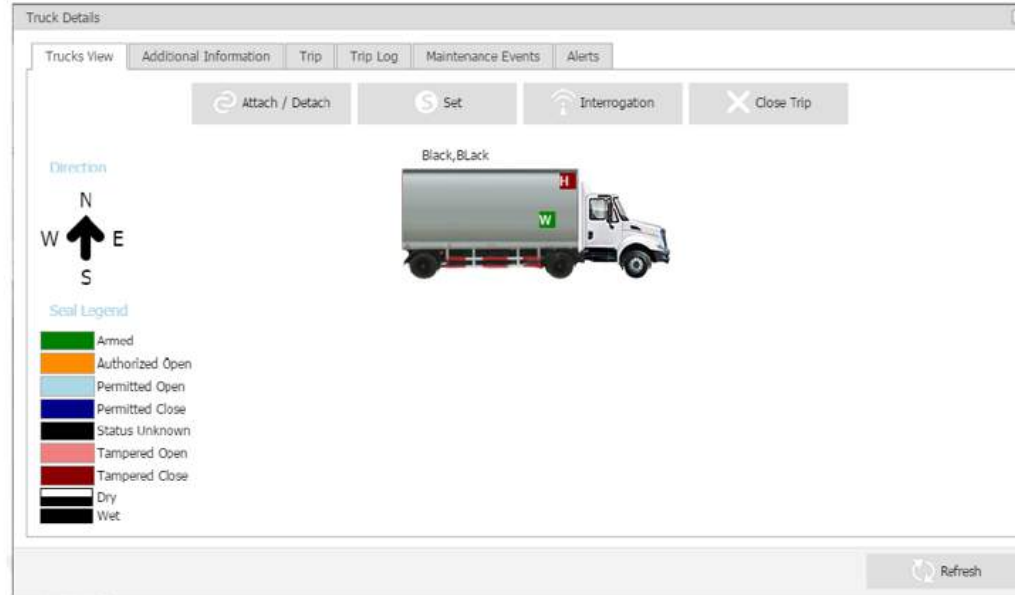


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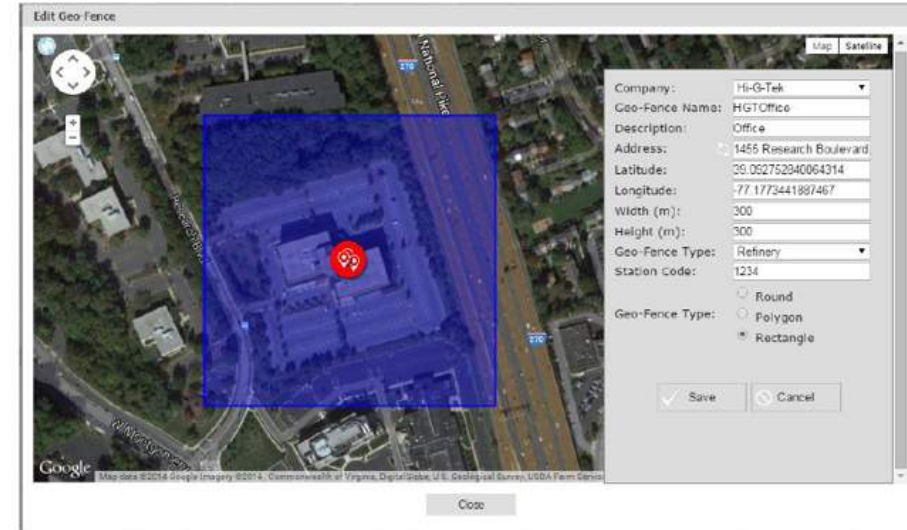


Enterprise Software Platform (ESP)

Fully Configurable Alarms / Configuration



Updated Geo-Mapping

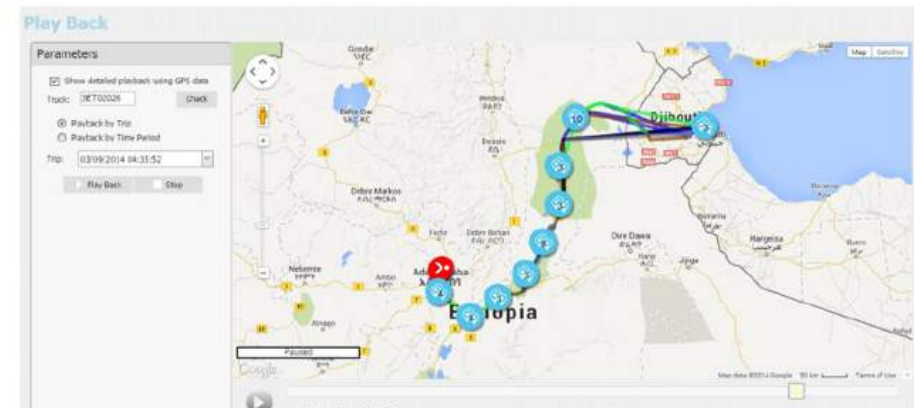


Enterprise Grade SaaS Platform

- Enterprise grade .NET platform
- Web-based thin client
- Microsoft SQL Database
- ERP / 3rd Party System Interfaces
- Comprehensive reporting / monitoring suite
- Will adapt to customer workflow and guidelines

- **Real-Time Alarms and Monitoring**
- **Real-Time Work Flow Compliance**
- **Full Trip Logs / Electronic Audit Trails**

Full Trip Log / Audit Trail



Sterna INTEGEM reference

Since 1996, Sterna Security in India has been delivering total solutions for preventing theft and controlling the petroleum transport and also filling tap security on gas stations.

The Sterna INTEGEM is the latest version with a total solution for transporting petroleum with 100% control at every point at every step in the distribution.

It is based on existing well proven products and technologies and the experience with our customers needs.

The most recent project is with Bharat Petroleum in India, which so far has installed and deployed about 3,000 gas stations and 1,500 tanker trucks and it is gradually being implemented.

During the first week of July 2019 there were about 5,000 trips that was monitored by the Sterna INTEGEM.



END OF PRESENTATION

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