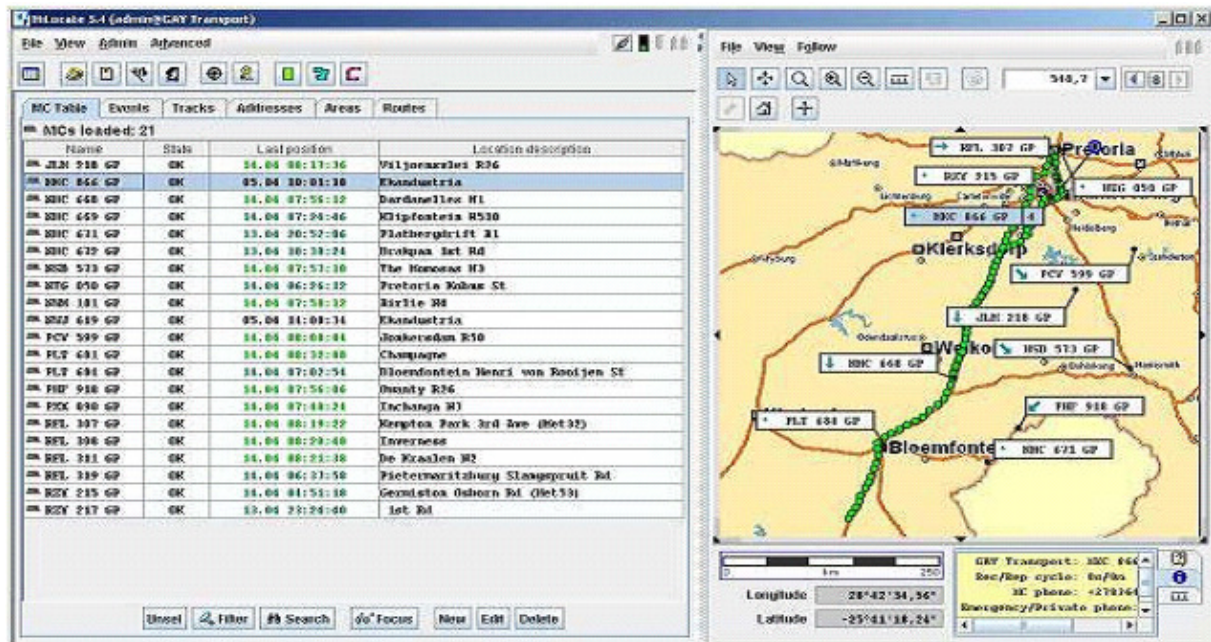


HiLocate control centre for CSB



- Positioning, Geofencing, online tracking
- Easy to use graphical user interface
- Flexible, open client server architecture
- Standalone and multi user configuration
- Powerful SQL database
- Professional map engines from Map Info and MAP & GUIDE
- Easy to integrate in enterprise applications via SOAP/XML interface
- Sophisticated reporting support, e.g. Trip Reports
- Individual reports can easily be created
- Ideal as project based platform
- HiLocate Enterprise for big control centers up to 100.000 CSB

HiLocate control centre provides a powerful platform for any fleet operator, location service provider or security service provider.

HiLocate control centre becomes even more powerful when fully integrated into an already existing operations environment. This can be done with little effort via SOAP/XML interface. HiLocate control centre is the predestined software solution to extend any existing operation center or fleet management application with telematics functionality.

HiLocate control centre will help to open new business opportunities!

Quick and easy Integration of Telematics Devices into existing IT-Environments

Integrators and software vendors are able to integrate mobile locating devices easily into back-end applications by using the integration platform HiLocate control centre. Based on open technologies and standards like Java und XML, HiLocate control centre offers a flexible and future-proof solution. Investment into telematics devices and infrastructure is more likely protected against changes of technology. HiLocate control centre enhances vertical solutions like logistics or security applications with telematics features.



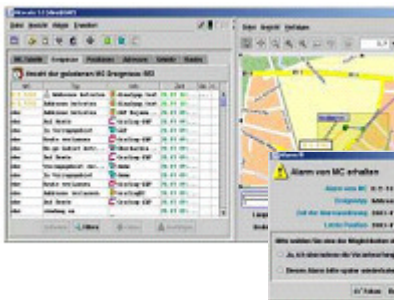
Location and Communication

Years ago, positioning with GPS (Global Positioning System) was an exclusive and expensive application. Nowadays, we find this technology spreading more and more into the modern private and business spheres.

In the private area, navigation systems in high-value cars are the most popular applications. Combined with area-wide available GSM mobile communication services, positioning devices are used to optimize business processes. Examples are dispatching systems for logistics service providers and transportation fleet management. As well as being able to find agents easily in emergency call centers from police, fire departments or emergency medical service provider.

Area supervision

It is possible to create addresses, areas and routes. Entering or exiting such GeoObjects can cause alerts in HiLocate control centre.



Event forwarding (SMS, e-mail)

All Events caused by the CSB, like emergency calls, geofencing events..., can be forwarded as SMS or e-mail.

Cost control

Growing requirements increases the amount of data that Needs to be transferred.

A mobile communication however is expensive, and operational cost issues start to appear. Hence mobile devices should only communicate if it is necessary and transfer data in a compressed mode. E.g. mobile devices of CSB are able to transfer up to 24 positions in single SMS. For bulk data transfer, technologies such as data call or GPRS are available.

Integrators or software vendors are now facing the problem of supporting several vendors, devices and communication protocols, because technology cycles are very fast in this area, a lot of adjustments and updates are waiting for them.

Extensive reports

Reports can be created automatically and printed as pdf-document or sent as e-mail.

It is easy to configure personalized reports and analyses in different format as pdf-, rtf-, html- or csv-document.

HiLocate provides easy integration

This scenario was the reason why CSB to developed an integration platform, which encapsulates communication and device specific protocols. The application programmer can use an easy SOAP/XML-Interface to retrieve positions and events. The message is the same, no matter what device is being used. In addition, the administrator configures the mobile devices with an easy-to-use graphical user interface. HiLocate control centre is implemented in platform independent programming language JAVA, allowing execution on any computer with JAVA virtual machine running (Windows, UNIX, LINUX,..). The architecture is flexible and internet ready, with Java and HTML-clients.

Technical Data

General

- Platform independent system (Java based)
- Configurable as compact single user system
- Prepared for full integration of enterprise applications via SOAP/XML
- Full support of clientele processing
- Mobile units structured in fleets / groups
- Universal database interface (any ANSI SQL database server with JDBC driver can be used)
- Full internet support (powerful client application with intelligent data caching enables fast access)

Graphical User Interface

- Intuitive and easy to use GUI
- Assistant based configuration even of all complex configuration parameters
- Standard delivery is English, German, French
- Edit and display of geofencing objects like addresses, routes and areas on map
- Intelligent placement of positions of mobile devices on the map, even if clustered
- Can be translated in any language
- Map operations like pan, zoom, focus, fit to view, measure distance and time of route
- Various filter functions for object lists
- Consistent representation and selection of all position related objects on map and in tables
- Track replay with easy access to archive
- Fast "map history" mechanism

Communication

- Adapter for connection to the SMSCs via SMPP
- Support of an unlimited number and combination of communication channels
- Secure transactions (robustness against SMS communication failures and server breakdown)
- User friendly GUI represents the communication status (request queue)
- Online tracking with data call allows realtime observation of vehicles
- GPRS
- Adapter for Siemens GSM Engine TC35 T
- Adapter for leased line connections to all European SMSCs via Dialogs SMS Server
- Adapter for leased line connection to the SingTel SMSC in Singapore via TCP/IP SMS
- communication fully configurable (validity period, repetition schema etc)
- Full support of GSM data call
- Scheduler for retrieving stored data from MC via data call (e.g. at 3:00 am)

Reports

- Fully programmable reports as plug-in
- Full access to reverse geocoder function
- Storable as pdf, html-, rtf- or csv-files
- Easy to configure SQL based reports
- Standard reports included (e.g. trip report)

Geofencing

- Address supervision
- Full support of CSB devices area supervision
- Full support of EPSa HiTrack route supervision
- All events configurable as (acoustic) alarms with operator acknowledge

Digital Maps

- Adapter for Map & Guide
- Adapter for MapInfo MapXtreme and MapX
- Map server accessible via internet (small installation effort)
- Map server configurable as client-internal component (fast access event in case of slow internet communication)
- Powerful reverse geo coder

Call Center Functions

- Emergency call management (notification of and acknowledgement by operator)
- Full configuration of the MC event handling, including alarm acknowledgement
- Alarm forwarding per SMS or email

Miscellaneous

- Automatic archiving mechanism for events and messages
- Basic, extensible HTML interface (Java server pages) with login, map and position request

System Requirements

Processor: >2,6 GHz, hard disc >30 GB

Recommended for clients:

- 1024 MB RAM
- Hard disk >30 GB (depending on map data)
- Graphic: 1280*1024 px; True colour (32 bit)
- Monitor >19"

Recommended for HiLocate Server:

- Server with Informix database
- 3 GHz, 1024 MB RAM
- Hard disk mirrored (RAID)
- Operating system: Windows 2003 Srv