

GPDTrack

Tracking & Fleet Management Platform

GPDTrack is a leading web based **GPS Tracking Platform** successfully used by Transportation Companies, Police and Fire Departments, Utility Companies, Service Organizations and businesses with Mobile Workforce around the Middle East.

The **GPD Technology** Tracking & Fleet Management Platform contains all the elements required to start your own Tracking Business or Manage your own fleets.

The platform supports localization, re-branding, application extension and integration with other systems through open API's. Customers and Tracking Partners can tailor Tracking services to reflect their own specific situation.

You can install **GPDTrack** on-site on your own server or you can subscribe to it in the form of **SaaS** in a Cloud based environment.

Multiple Map providers are supported and custom Map imports ensure the most suitable maps for your implementation.

A lightweight Web interface is available for Mobile Devices making **GPDTrack** accessible from any location. Access to the system is governed by user profiles with specific privileges for each in order to define what can and cannot be accessed. Pre-configured Application templates are included to enable quick implementation. Multiple application instances can be created on one Server.

GPD Technology is committed to constant development of the Platform and its functionalities. The User Interface is **fully customizable** in order to suit the operator needs.

A professional support structure is in place to guarantee effective and continuous user support.

GPDTrack platform contains a wide set of features including special functionalities such as:

- Driver Identification System
- Street Speed Limit Rules
- Load and Weight Management

*(For a detailed list of available Reports and Features, **Exhibit A** attached can be consulted)*

Device support

GPDTrack supports a wide range of GPS based Tracking devices from diverse manufacturers and various makes. The Platform supports Android, iPhone, Windows computers and other smart devices. This makes it future proof, flexible and suitable for large implementations with multiple device varieties.

Real-time Fleet Tracking

The platform offers real time tracking of vehicles location data in a simple web browser interface. A live view of the entire fleet allows adequate control over the operation and triggers decisions such as: the best vehicle for a given job; dispatch times depending on Traffic Data,...

Geo-Fencing & POI

The Platform allows easy marking of various Points of Interest (POI's) which may represent a variety of entries like clients, warehouses, offices, delivery points etc... Users can Measure the time spent on each customer to improve the delivery process or report unauthorized usage outside off-hours or beyond city limits.

Alerts and Notifications

An event can generate alerts through the application, either by email or SMS depending on importance or the need for immediate attention, such as:

- SOS Alert, Vehicle theft, ...
- High temperature,
- Speeding,
- Excessive idling, Off hours vehicle usage, ...
- Geo-fence violations, etc...

Reporting

Common Reports are offered as standard with **GPDTrack** Server to help you analyze and improve your operation. **GPDTrack** Framework helps tailor additional reports based on any data in the platform. Reports can be presented directly in a web browser or scheduled to be sent by email.

Vehicle Maintenance & Documentation

The Maintenance plug-in keeps track of when a vehicle is due for service. It shows a maintenance status overview and sends notifications when vehicles pass service intervals. The System will also keep track of all paper work related to the fleet vehicles such as documents, insurance, licenses,...

ECO Driving

The Eco Driving plug-in measures harsh driving, speeding and idling and produces an "Eco" score for a vehicle. Vehicle wear can be substantially reduced thus minimizing cost and eco-impact.

Mobile Plugin

Our Mobile plug-in brings a modern, map-centric, full fleet view User Interface. The map view is designed to take advantage of all the available screen space of your smartphone or tablet and supports features such as Mobile Dispatch.

Localization Editor

The Localization feature adds a user-friendly editor function for customizing the translations of the Graphical User Interface into different languages. It also adds new privileges that control access to languages for different applications and roles.

Event Rules

Event Rules can be very simple or may trigger complex sequence of actions from multiple signals based on advanced logic. They can be used to show SOS alerts on a Map or detect that a vehicle entered or left a Geo-fence etc... Event Rules can be used to send alerts to fleet managers or other systems for further operational integration. ECO Reports use Event Rules to collect harsh driving data. Eco Rules can be customized and automatically reported.

Extra Features

- **Waste Management** (Bin Manager, All Weighing Systems available in the market , Bins RFID, etc..)
- **Gauges:** Display on Screen Vehicle Status
- **Camera:** Upload & send Photos or Videos to Server in case of accident or maintenance
- **Live Graph:** Display on Screen Vehicle Status in Graph mode
- **App Logo:** Personalize Application with Customer Logo
- **VSAT Unit:** Tracking Unit with Satellite communication
- **Area Measure Tool:** Measure an Area on the map and report occurring events
- **Proximity:** Displays vehicles in a given radius
- **Cell ID:** Display Telecom Cell ID
- **Direction:** Create a Route with Details of fuel consumption/cost & Co2 information
- **Graph Replay:** Replay of Trip route on a map with graphs of various signals (ignition/speed/ time/distance/ accident etc..)
- **Dispatch:** Create & manage jobs/routes and find closest available vehicle to complete a task
- **Heat Maps:** Different maps to be used like Here, Tom-Tom, Waze etc...
- **Snap To Road:** Trace in perfect way the Trip Tracks
- **Tracking Tools:** Different type of tools to help with Trip Tracking
- **Abu Dhabi Maps:** Abu Dhabi Map issued by Abu Dhabi Spatial Geospatial
- **Gas Maps** (Dubai, Sharjah and Ajman) with Address search

Available reports

1. **Trip/Idle Summary:** Shows summary of the trip with Max speed, Total distance covered, trip & idle duration etc OR Detailed report with start & stop address, time and duration
2. **Signal Report:** Shows Battery voltage, Mileage, Seat belt status, Ignition, Accident , Harsh Brake, Rpm, Engine temperature, Speed, fuel used, Total vehicle hours, driver card No... etc
3. **Violation Report:** categorised by vehicle – Shows details of violations like Over speeding, Harsh braking, Accident, Geo-fence violation...
4. **Time on Site:** Shows the time and duration of site visits per vehicle
5. **Total Distance:** Shows distance covered by the vehicle in selected period to check vehicle under/over-utilization.
6. **Speed Chart:** Shows vehicle speed every 30 seconds with a graphical presentation.
7. **Driver Identification:** Shows current driver details.
8. **Employee driving violation:** Shows details of driving violations with employee and trip details, with locations shown on Google maps.
9. **RAG (Red, Amber and Green) Report:** A monthly report to rate the behaviour of drivers/employees. The score is based on occurrences of Over Speeding on roads above specified speed, Overspeed in certain locations, Seat belt Unfasten, Harsh Braking ...
10. **Vehicle User:** Shows analysis of a vehicle driving by single/multiple drivers for a selected period
11. **Special & Custom Reports:** Fully customised Report Generation where users can select the fields and define layouts as needed with possibility of exporting to PDF or Excel.

GPDTECH Server Features

GPDTECH Server is a future proof tracking platform with a rich feature set to fulfill common tracking requirements. The modularity and configurability options make GPDTECH Server an ideal platform for growing and changing tracing businesses. To simplify deployment and management of large installations GPDTECH Server includes pre-configured application templates that can be customized to fit your specific purpose.

Solution modules

Module	Description
Driver Journal	Manage your trips for reimbursement and tax purposes.
ECO driving	Create reports and score cards to monitor and improve fleet efficiency and driver behavior
Temperature Monitoring	Solution for monitoring transports with multiple temperatures
Vehicle Maintenance	Keep track of when your vehicles are due for service
Fuel Consumption	Keep track of when your vehicles Fuel Consumption

Platform

Feature	Description
Access Filter	Setup filters to control which IP addresses can access your GPDTECH Server
Application templates	Create applications from templates. Can be exported/imported between servers
Branding	Use our own logotype.
Cleanup	Delete history data after a set time period. This way you can control the size of your database and how long data is kept on the server
Custom units	Create your own measurement files
Device Mapper Scripting	GPDTECH variables can be assigned the result of a user defined script
Fuel consumption	Track fuel consumption based on fuel fill receipts
Garmin Support	Support for Garmin FMI and Garmin fleet 590 devices
Localization	Create your own languages and customize existing languages
Map support	You can use Google maps, Bing, Map24, OpenLayers, CloudMade, Baidu, etc. Your own custom maps and Abu Dhabi Gov. MAPS
Mobile interface	Manage your vehicle fleet from mobile phones and tablets!
Odometer management	Use device odometers or configure virtual server side odometer to measure trip distances

Feature	Description
Overview Application	Create an overview application to handle users from multiple applications in one view
Payment handling	Handle payment related information on a GPDTECH Server. Simplify payment handling for tracking partners.
Road speed database	Create event rules based on real road speed limits using the OpenStreetmap database
Role based Access control	Control user access to data and application features based on Roles
Statistics	Statistic module to gather server usage information
Web based	Application runs in all major web browsers
Web Service Scripting	Script your GPDTECH Server Web Services to fit the data format required by external systems

Tracking

Feature	Description
Area Search	Search the map for your vehicle history for a selected time period.
Camera	Take pictures using cameras in your vehicles.
Cell ID	Use mobile network Cell IDs to track vehicles when GPD reception is missing
Custom icons	Use your own icons for vehicle markers and POI:s
Custom marker colors	Set your own colors for different objects
Driver ID	Manage drivers with RFID or IButton logins
Fat points	Automatically created when objects are idling
Geofences	Add geofence based events
Jobs & Dispatch	You can create jobs to which you can assign a location, time, and a vehicle to execute it.
Live Trace	
Map Measure Tool	Draw lines to measure distances directly on the map
Notes	Create notes on Users and Vehicles for example to keep track of tasks or to notify other users with short messages
Points of Interest	Import existing POIs from CVS files or create new by point and click inside the the user interface.
Public GPD tracking on your homepage	With the Publish plugin you can share views in VehicleTracker on a public URL.
Real Time Tracking	Track your vehicle fleet in real time in a web browser.
Signal Graphs	Draw graphs of tracker signals in VehicleTracker
Status Messaging	Show status messages in real time

Feature	Description
Time on Site measurement	Measure time spent in geofences and time spent at points of interest
Track History management	Save unlimited track history or clear tracks after a certain period
Track Replay	Replay track history for a selected time period on the map
User Groups	Group tracked objects using Views

Notifications

Feature	Description
Alarms	Show alarms in user interface in real time
Dashboards	Real-time dashboards with fleet statistics
Delayed Event Rules	
Driver fatigue alerts	Measure that drivers follow regulations about driving hours and rest periods
Email Notifications	Get notification on events over email
End Expressions	
Event Rules	Create rules that trigger events
SMS Notifications	Get notification on events over SMS
Time scheduled Event Rules	

Reporting & Data export/import

Feature	Description
ArcGIS Integration	Pull vehicle positions from GPDTECH Server to an ArcGIS Server
IFTA report	IFTA (International Fuel Tax Agreement) report used to simplify the reporting of fuel use by motor carriers that operate in more than one jurisdiction
Live KML feed	View positions in real time in Google Earth
Points of Interest import	Import and export POI lists as KML and CVS files
Reporting	Over 20 reports are included and you can create any kind of report with the GPDTECH reporting framework
Track export	KML, CSV

Devices

Feature	Description
Chat	Chat features to mobile phones and Garmin PND.
Custom device commands	Create your own commands to your tracking devices
Device management	Controlled batch management of a large number of tracking devices
SMS support	Multiple options for SMS support are available
Terminal	Analyze device traffic in real time, raw and enhanced
Tracking device failure report	This report shows how much time your GPD trackers are "off line" to help you identify faulty trackers and bad usage.
Tracking device support	GPDTECH Server supports over 300 different tracking devices

Developer

Feature	Description
API:s	Published API:s for application access
Data Forward	Forward the unmodified data sent from a device to one or many other GPDTECH Servers
Database support	MySQL and MS SQL
Open protocols	Open GPDTECH Server protocol
Plugins	Create your own plugins into the web interface
Scripting	Customize your installation with scripting, for example Device Mapper Scripting and Web Service Scripting
Web Services	Show users live on a map on your web site

Reports & Additional Feature Hardware and Software

Feature	Description
Directions	Routes Optimization Create and Calculates Routes, Save routes and calculate Distance, Full

Feature	Description
	Cost and Co2 emissions
Dispatch	Job Dispatch and Routes Optimization
Notes	Leave Notes per vehicle
Chat	Send SMS to Drivers Mobile from Control Room / Operator
Broadcast Message	Send SMS to a Group of Users from Control Room /Operator
Track Replay	Report for replay a trip
Proximity Function	Search the nearest vehicle to a point
Map Coordinates	Search a point in the map and reverse Geocoding
Speed Chart	Special analysis report for after an accident
Total Distance	Total Driving distance for a specified period
Reports with Customize Fields	Customize trip and events reports, as per customer need
Street View	Google street View

- 1- Capture the Violations as per Street Speed (without tolerance) exactly as mention on street speed panel, is up to you to add any tolerance, and violation delay before validate the violation.
- 2- Auto login to a specific vehicles example by Plate number instead to search the car in all location, press Ctrl + Plate [39289-10](#)
- 3- Routes Optimization
- 4- Proximity

1. Provide to the COMPANY the web service of the SDK in order to integrate with other systems.

Proximity - X

Filter km radius

Vehicle	Route(km)	Aerial(km)
Mazda3 / 72096-14	89.6	68.9
Test	89.9	69
Bangladesh		
Mega Maid Car 80527-16	90.5	69.9
balushi	110	70.3

Directions + X

Right click on map to select Start/Destination points!

Saved routes

Fuel price: <input type="text" value="1.50"/> value/litre	Total fuel: <input type="text"/>	Total hauling: <input type="text"/>
Consumption: <input type="text" value="30.0"/> litre/100km	Total distance: <input type="text"/>	Total fuel price: <input type="text"/>
Hauling fee: <input type="text" value="0.90"/> value/km	Total duration: <input type="text"/>	Total costs: <input type="text"/>
Custom speed: <input type="text" value="80"/> km/h	Custom duration: <input type="text"/>	Optimize route: <input checked="" type="checkbox"/>
CO2 emissions: <input type="text" value="100"/> gram/km	Total emmissions: <input type="text"/>	<input type="button" value="Compute"/> <input type="button" value="Clear"/>

- Device Mappers
- Event Rules
- Tags
- Views
- Roles
- Icons
- Accumulator Types
- Localization
- Sessions
- App Builder
- Import Template
- Dashboards
- Chat Profiles

- Windows Maintenance
- Directions
 - Dashboard
 - Terminal
 - Dispatch
 - Notes
 - Command Control
 - DirectionSE
 - Points of Interest
 - Broadcast message
 - AppLogo
 - Street View
 - Online Status
 - User Actions
 - Device Manager
 - Track Replay
 - Graph
 - DIS
 - HarshEventReport
 - GraphReplay
 - Map Coordinates
 - Speed Chart
 - Current Driver
 - HSE Driver Licence
 - Total Distance
 - Reports-Map
 - TripReports
 - Tracking Schedules
 - Publish
 - Area Search