MWI METROPOLITAN
Metropolitan Wireless International

Automatic Location
Tracking System

Personnel Tracking

Vehicle Tracking

Asset Tracking

Motorola Radios GPS Tracking Capability

Mobile Radio & In-Vehicle Radio

Android Phones

Automatic Location Tracking System

Overview

MWI's Automatic Location Tracking System (ALTS) solution is based on GPS technology to track vehicles, personnel or any asset that has an in-built GPS receiver and has the means to communicate its position to a backend system.   The solution is feature rich and highly scalable.

Features a light-weight web based scalable solution that can be deployed on the intranet or internet environment to track hundreds or thousands of devices.

The software provides a map-based view to display the real-time tracks of a single device or a group of devices as defined by the customer.

ALTS system has been successfully deployed on several Dimetra & ASTRO infrastructure in the Asian region. It can support GPS updates from TETRA / ASTRO radios, LEX and other Android based phones.

Features (Basic / Standard Package)

Group Map

- Track movement of selected radio groups in real-time.
- Auto Update on/off
- Standard MAP features - Pan/zoom map, re-centre map, distance calculator, etc.
- Switch between device icon or group icon
- Display vehicle, person or radio info on map
- Display active alert as flashing icon on map
- Show Geozones on map
- Hide or gray out offline radios
- Location radio details in tabular form

Device Map

- Track movement of selected device / vehicle in real time.
- Auto Update on/off
- Show historical positions of a device
- Standard MAP features - Pan/zoom map, recenter map, show device details, distance calculator, etc.
- Show speed and direction of a device journey using different icon color
- Replay archived GPS positions
- Show Geozones
- Location details in tabular form

Ad-hoc Command to Device

- From group map & device map, user can send ad-hoc commands to selected device.
- User can also send SDTS messages to selected device

Supported Maps

- ESRI Shape files, Geotiff files,
- Geo database & PostGIS database
- Image file overlay (for buildings)

(*Note*: Motorola shall supply the maps for MWI to format & load into MWI's MAP Server)

- Openstreet Map (Online Map)
- Google Map (Online Map)

(*Note*: Motorola shall buy Google API key for Google MAP Service usage)

Basic & Run Time Alerts

- Speed alert – thresholds can be defined.
- Emergency alert – emergency button/man down is triggered.
- Comms Failure – no updates for designated time frame.
- Geofencing alert – create geozones to track radios inside/outside geozones,
- User can acknowledge/close active alerts on this page.

Historical Alert Page

- Provides ability for a user to search alert history based on combination of criteria
- Reports can be generated for historical alerts

Reports

- Device Event Detail Report;
- Group Event Detail Report
- Group Last Location Summary Report.

Account Admin

- Represents a customer/organization.
- An ALTS system can be shared by multiple customers/accounts.
- Each account can be configured with distinct account logo, time-zone, metric system, GPS format, device/group label etc.

Device & Group Admin

- Device can be configured manually in ALTS System or imported from exported UCS data in CSV format (for Motorola Radios).
- Device Group definition allows for monitoring of radios as a group, radio groups are created according to functions of organizations, the system can assign radio groups to users so that users can track only assigned radio groups.

Vehicle/Personnel Admin

- Devices can be associated with vehicles (or) persons. Tracking and reporting can then be done based on vehicles/persons.

Language Support

- English.

Geozone Admin

- This feature allows creation, editing and deletion of geographical fences (geozone) on the map display.
- ALTS system supports Point Radius & Polygon geozones
- Polygon geozone can have up to 20 vertices.

User & Role Admin

- Roles can be created for grouping of access rights; a user configured under a role will inherit the access rights from the role.
- Access rights are assigned to different users to access different resources in the system, including functions, and information pertaining to device groups.

Alert Rule Admin

- Alerts are triggered based on alert rules; alert rules can be configured according to different criteria such as position, speed, date time, device groups etc.

Advanced Features / Functions (offered as Options)

Voice Call & Messaging

- From group map & device map, user can select a Radio and make a voice call or send Short Data Message to devices.

Map Matching

- Perform offline map matching for vehicle mounted device to snap GPS to road
- Map matching can be performed based on OSM or ESRI map

High Availability Support

- To cater to high availability, the solution will be deployed with load balancing and DB replication.

Alert Notification

- ALTS supports 3 types of alert notifications - SMS, Email and SDTS message.

Additional Language Support

- Spanish, French, German, Greek, Italian, Dutch, Hungarian, Portuguese, Romanian, Russian, Serbian, Turkish, Japanese, Chinese, Thai, Indonesian.
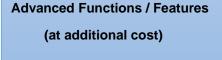- Customer required language

Display and Search POI on Map

- User can select a POI type and search POIs from map layers
- Result POIs will be displayed as different icons on map
- POIs can also be manually configured in DB and be displayed on map

Navigation

- Navigation on map by specifying start and end point or by Searching place names
- Navigation based on OSM/ESRI map
- Online Navigation using Google Map

Product Specification

Supported OS	Linux and Windows Server
Supported Browsers	Chrome, Firefox, Microsoft Edge
Max Number of Radios	Up to 100,000
Max Number of Web Clients	Up to 100
Supported Interfaces	SDR, MUPS, IMW and MWI's Interface for Android Phones such as LEX
ALTS Server	**Server Specification:** Depending on number of radios, MWI provides different server specifications For up to 2000 radios at 30sec interval and data to be stored for a period of up to 3 months: - Intel Xeon 6 cores, 2.1 GHz (or equivalent) - 16 GB RAM - 2 x 600GB SAS Hard Disk (RAID 1 config) For more radios, please contact MWI for the server specifications
ALTS Client	Minimum Specification for up to 1000 Radios: - Intel i5, 3.2GHz processor (or equivalent) - 8GB RAM

System Package

Standard/Basic Software **Includes:**	- ALTS Software - Support for 5 clients - English Language Pack - Services for MAP formatting (MAP to be provided by Motorola) - User Documents - Shipment Terms – Ex Works, MWI, Singapore - Training - Standard Software comes with standard features, support 10000 radios - Basic Software comes with basic features, support 2000 radios - For additional radios please contact MWI

Add-on Components (Options)

Advanced Functions / Features **(at additional cost)**	- Local Language Package - POI Display - TETRA / ASTRO Radio or Talkgroup Voice Call - Short Data Messaging - Alert SMS/SDTS/Email Notification - High Availability Support - Map Matching - Navigation - Map POI Feature search

Contact Us:

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