

# Portalify Location Solutions



## Integrated automatic resource location solutions

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Portalify provides Automatic Vehicle Location (AVL) and Automatic Person Location (APL) systems and other applications based on GPS accuracy.

Solutions are based on the marketleading Data Messaging Server (DMS) product that delivers all the benefits of location & messaging services.

Portalify automatic resource location solutions consist of the DMS-based AVL server and client component.

## **DMS AVL server component specification**

### **Rapidly and flexibly delivering location and status information**

Live location and status information can be delivered to AVL client operators within control rooms, and additionally, to mobile worker terminals and devices – enabling field-based strategic decision-making.

### **Securing robust network operation for nationwide tracking**

Standard ETSI LIP and OMA protocols are implemented for location information. Benefits include complete protection of the radio network through sophisticated load balancing and prioritization during

peak load situations. Thus, DMS easily secures network operation for deployments comprising tens of thousands of users, as a highly robust and proven solution on nationwide scale.

## **Supporting multiple networks, devices and applications for greater choice**

Portalify DMS is a multi-bearer solution that fully supports tracking over all major wireless technologies, e.g., TETRA, GPRS, 3G etc. Location solutions for both control room and terminal users are provided, including extensive support for all device categories (e.g., tablet PCs, terminal handsets, PDAs & MDTs) and multiple & single operator back-end positions.

DMS provides a generic and open interface for other AVL client applications, and supports Industry standard GIS mapping solutions. As a complete mobile gateway, the product will also flexibly interface to other applications, databases and systems.

## **AVL client component specification**

### **Displaying real-time location information**

The DMS AVL client allows organizations to view, monitor and track resources. Detailed street-level maps with user-friendly icons & features enable resource location display on sophisticated web-based or customer-centric client applications.

The client application provides live location information visualization, allowing field resources to be dispatched in real-time (e.g., in emergency situations), based on accurate geographical information.

Bounded geographical areas known as “geofences” can be created, and alarms generated if vehicle(s) progress beyond geofence thresholds.

## **Visualizing historical information and generating reports**

The product generates fully customizable reports, e.g., for journey summaries allowing efficiencies in planning & scheduling based on full historical information. Many historical information features are provided, including play-back of past positions, display of vehicle trajectories & tracks, establishing local tracks, distinguishing tracks, play-back by time or tracked unit etc.





**Complete mobile data & situational awareness solutions (optional)**

**Integrating automatic resource location for unified mobile data solutions**

Portalify DMS serves as a comprehensive messaging & mobile platform. In addition to serving location information, it intelligently accesses, manages, stores and delivers any type of textual or image information.

Benefits of this approach include easy integration of automatic resource location with a wide array of other applications, e.g., video surveillance, satellite navigation, task

management, image messaging & telematics etc. These can be driven from the same top-level application that the Portalify AVL client is operated from i.e. as a single integrated solution.

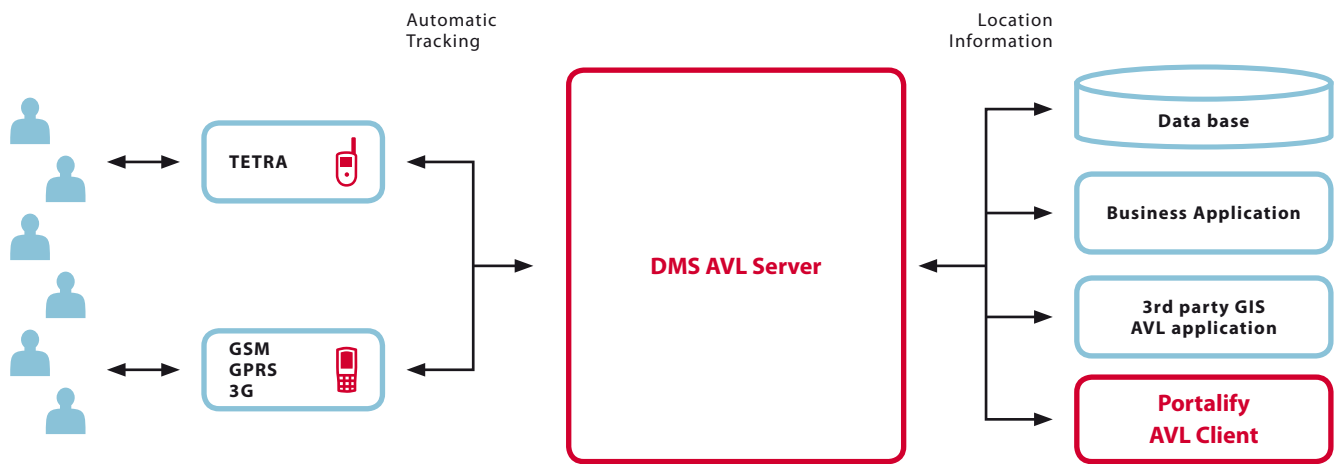
**Customizing mobile data solutions for complete situational awareness**

Portalify DMS allows easy implementation of customer specific application logic. This enables the customization of location applications and integration with other applications as required.

Modifications to other applications can be avoided as DMS can process the data or messages as needed. Benefits include

savings in time and money because updates can be confined to DMS rather than outside applications. The customization process is easily conducted using the Portalify DMS script engine that requires absolutely no programming knowledge.





### Location information for all applications

#### AVL Server Features

##### External Interfaces

- LIP for terminal location with triggered reporting support (ETSI TETRA Location Information Protocol),
- OMA/MLP for location information clients (3GPP OMA/MLP 3.3.0, compatible with earlier versions),
- Web Service and Enterprise Service Bus compatible SOAP-based OMA/MLP supported,
- Custom integration options using DMS integration tools.

##### Tracking Capabilities

- Radio & person tracking,
- Vehicle tracking (AVLS),
- Multi organization support,
- Centralized management,
- User tracking across handsets with login,
- Team and patrol tracking.

#### Location Data Sources

- Global Positioning System (GPS),
- Network Cell ID,
- External systems,

#### Supported Networks and Technologies

- Direct infrastructure connection to any TETRA network, including concurrent multiple vendor operation,
- Multi-bearer communications & switching – GSM / GPRS / 3G, etc.,
- LIP, OMA and NMEA.

#### Efficient real-time architecture

- Portalify DMS AVL server is based on an efficient internal real-time architecture,
- Track very large numbers of location targets,
- Serve large numbers of location clients with rapid information deliveries,
- Dedicated load control for efficient operation to nationwide scale.

#### AVL Client Features

- Real-time information display,
- Historical access – display of play-back information, e.g., by time or tracked unit etc.,
- Definable vehicle trajectories and track plotting,
- Distinguishing and establishment of tracks,
- Fully customizable reports,
- Enables planning & scheduling,
- Bounded geographical areas – geofences and alarm generation,
- Flexible GIS map zooming and panning.



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Portalify has been at the forefront of advanced situational awareness solutions consisting of mobile messaging and location tracking solutions for over 10 years, and its Data Messaging Server (DMS) is currently the market-leading product for mission critical data in professional communications markets. As a robust and proven solution, DMS has been widely deployed, including on several large nationwide networks.

Headquartered in Helsinki, Finland, Portalify is an independent, growing company.

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