Data Management System for In-vehicle Computer

The customer is a Singapore based automobile infotainment products company.

Business Objective

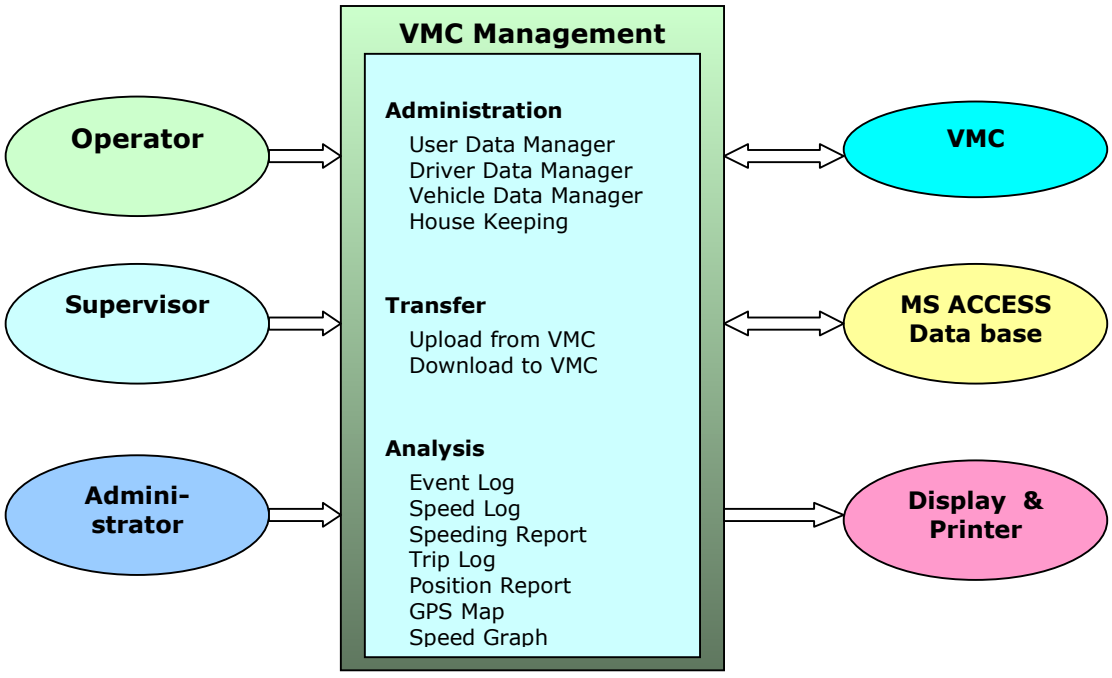
Ushustech developed a data base management application for Position data (GPS) and Power Train data of an automotive system.

System Overview

The system consists of two components:

1. In-Vehicle computer (IVC)
2. Off-Vehicle PC.

The In-Vehicle computer is based on a microcontroller which acquires the vehicle data and stores it on a non-volatile memory. This firm ware also has security interfaces like smartcard verification for driver autorisation. There are other features like GSM-SMS interfaces for smart alert to a pre-programmed number.The data is transmitted to a PC through RF link (or USB) on request. The data acquisition, processesing and management software in the PC organises and maintains the vehicle data based on a vehicle ID. Different types of repors and graphic outputs on location maps are provided.



Special features

- Can transfer data using both USB and RF
- Monitors multiple sensors
- Flexible data querying
- Extensive data analysis and reporting

- Graphical outputs
- Threshold values can be remotely set
- Position plotting
- GPS

Applications and potential areas of applicability in future

- Logistical applications
  - Vehicle tracking
  - Vehicle Monitoring
  - Container Tracking
- Automotive research
- Vehicle Performance Monitoring

Future enhancement options

Depending on the hardware and sensors used the system can be used for remotely monitoring any parameters for any type of machines/vehicles.