



**MAKE : NEW WAY ELECTRONICS
MODEL : BUS TICKETING SOLUTION**

OVERVIEW :

The Integrated Transport Ticketing Management System for Public Transport Organization is a cloud based application for complete ticketing management of multiple bus depots to provide significant operational benefit in managing day to day operations. The solution will provide the scalability with minimum customization. Solution is a complete Online ERP (Resource planning) for any City, State or Private Vehicle management including Duty allotments and dispatches, Automated Fare Collection System, Re-conciliation Fleet, Tickets, Pass, Revenue, Expenses. System has dedicated modules for Operational, Inventory, Fuel Management, Vehicle Tracking etc. Project team can deliver an industry-proven solution environment to deliver efficiency, productivity, and competitive advantage. A team will ensure the successful implementation of project to client satisfaction. The application will operate as per Business Rules of transport and are designed to be easily accommodating future modifications as per Business Rules with minimum customization.

Application is designed to meet technical and functional requirements of Transport Management System.

Bus Ticketing Application:



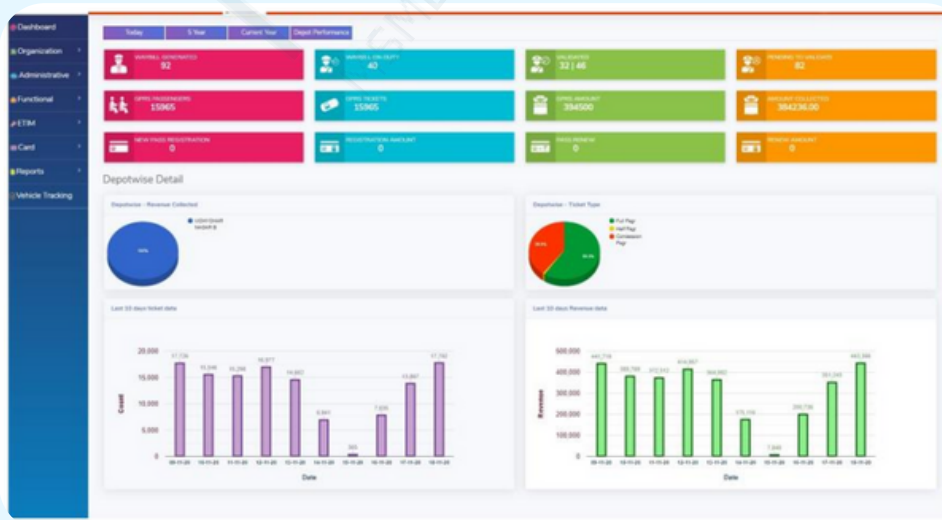
Figure: Login Screen

Features at Glance:

This ticketing Management application has multiple features. Some of the major features are listed below.



- Hawk Eye View - Dash Board
- Fully Integrated Operations using Single Dashboard
- Administration Management
- Organizational Management
- Functional Management
- ETIM Management
- Efficient Route Management
- Duty & Schedule Management
- Ticket Management
- Fare Management
- Revenue Management
- Integrated Smart Card Pass Management
- Inventory Management
- Online Reservation System (ORS)
- Public Online Reservation System (PORS)
- Integration with National Mobility Card Possible
- Analytical Reports and MIS Generation

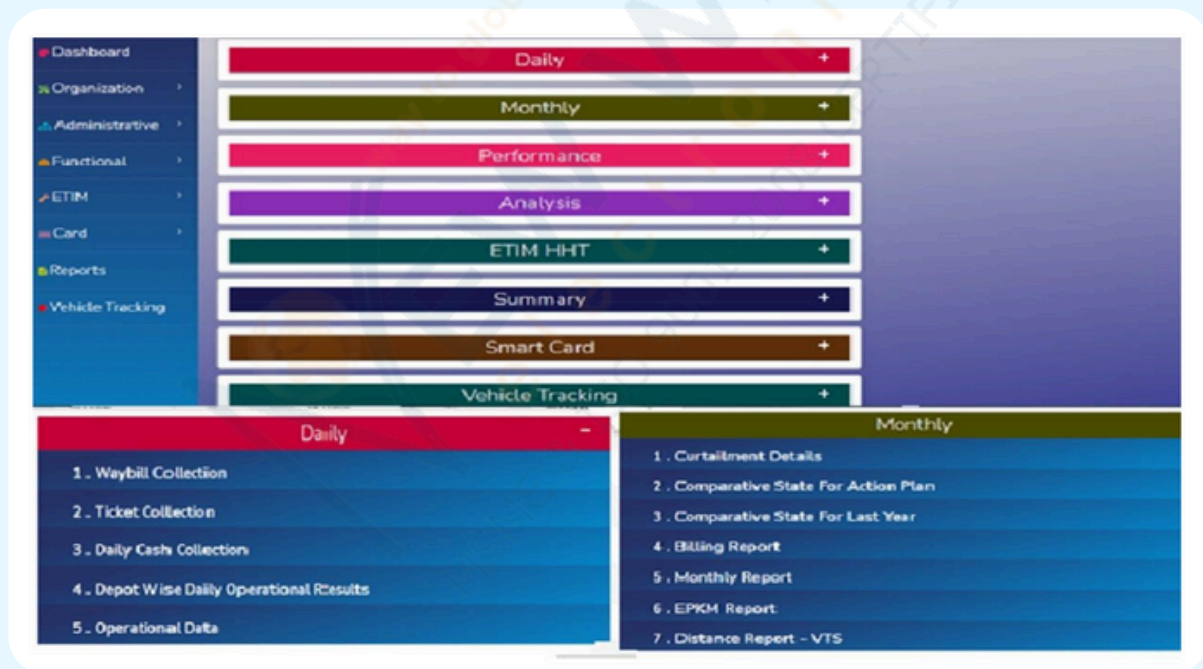




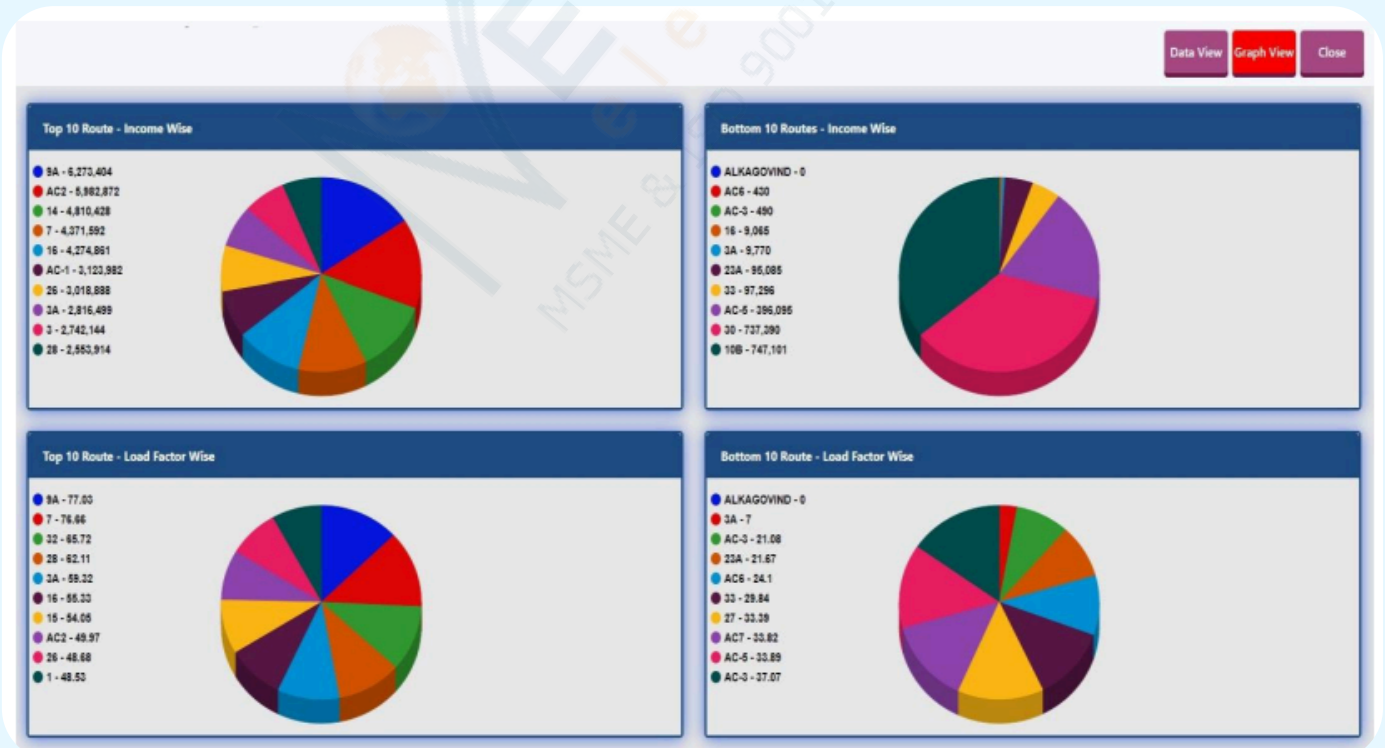
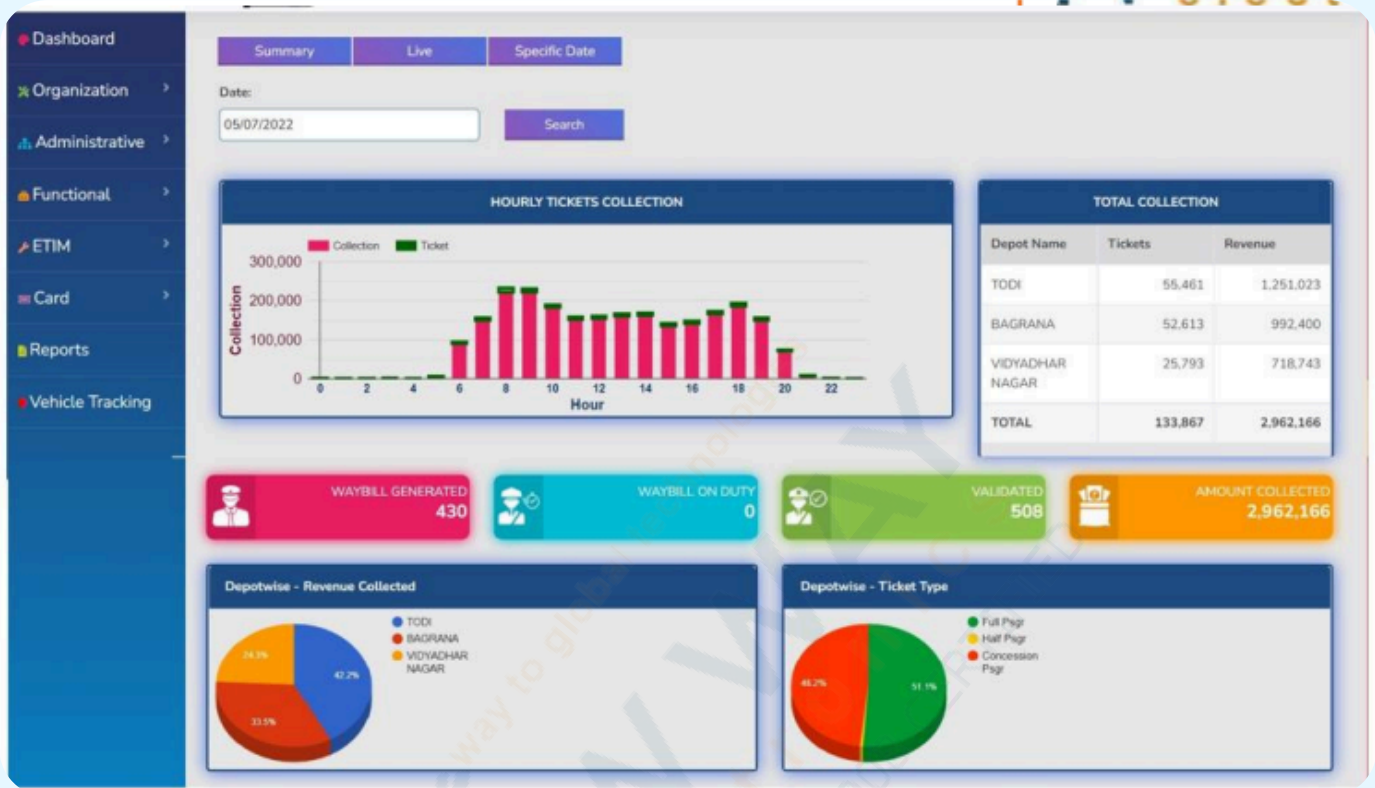
MIS / BIS:

Once the Application and Data base is hosted at the cloud, the central server will be able to pull the data from local servers or ETIMs directly. Data on daily no of waybills, conductors, drivers, fleet and total tickets generated per route or per trip, this data will be compiled to provide valuable information. The data in the form of key information like route wise collection, peak load handling period etc will be available through various graphics. This information will help achieve all the Regional Manager to focus on key areas of operation, routes, drivers, conductors etc. This will also help take few key decisions so as to optimize the operations and Revenue per Region, Division or even Depots.

MIS REPORTS



The Key information in graphical presentation helps analyse the data well and helps take key instant decision for the operation. Each User like Depot manager or division manager will be able to see the respective data of the region. Whereas at administrator level or at the command centre level, data of entire State or City corporation will be available and can be tracked. Administrator user can provide additional support to region in terms of providing key information or making changes to help improve the efficiency of operations as well as revenue.





Benefits:

The operation team and users can easily adapt the system that is perfectly suit for the transport ticketing management requirements.

- Solution meets Functional Requirements of Ticketing Management System.
- Efficient planning of bus services and duty schedules.
- Detailed ETIM inventory information.
- Tracking of ETIM and its Battery Level at Regular Intervals.
- Reduction of delay in daily duty operation.
- Easy to train, use and expand the usability of application.
- Automated fare management system.
- Recharge of smart card and ticket issuance using ETIM machine, at the Counter as well using Mobile Ticketing.
- Correct analysis of revenue and passengers.
- Reduced revenue leakage.
- Revenue reconciliation on Real Time basis.
- Integrated with any Public Information System.
- Integrated with Vehicle Tracking System.
- Android Device for Ease of Operation.
- Online Ticketing and Data Management.
- Integrated Mobile Ticketing.
- Integration with National Common Mobility Card is possible.
- Integration with Biometric Authentication
- Account based Integration and Passenger Profile and use tracking.





Vehicle Tracking System:

1) The Vehicle Tracking System is the key component of the Integrated Transport Management System. The System is integrated with AIS 140 certified devices. The devices provide location information to Central Command Center System. This integrated Dashboard provide hawk-eye view of all the vehicles running across city and/or state. Dash board will also provide access to multiple reports on various parameters of vehicles in the form of various MIS.

2) The AIS 140 device is capable of transmitting data to 2 different IP addresses one to be used for regulatory purpose and the other for Emergency response system. Operational team at Command center will always have access to complete data for operational and monitoring purposes.

3) The system can be configured to create a variety of alerts for different situation like Speeding, geo-fencing, incidents, accidents between vehicle crew and command center / control room. 4) Central server will host the fleet tracking application to manage and monitor fleet performance through backend intelligence tools supported by maps, texts, reports, alerts on the graph displays generating alerts for exception events. 5) This is an optional module as part of a complete offering of ITMS project which can be added as additional module. A separate working and proposal can be proposed to provide Passenger Information System. The data can be made available to passenger to track each and every vehicle on a Mobile Application.

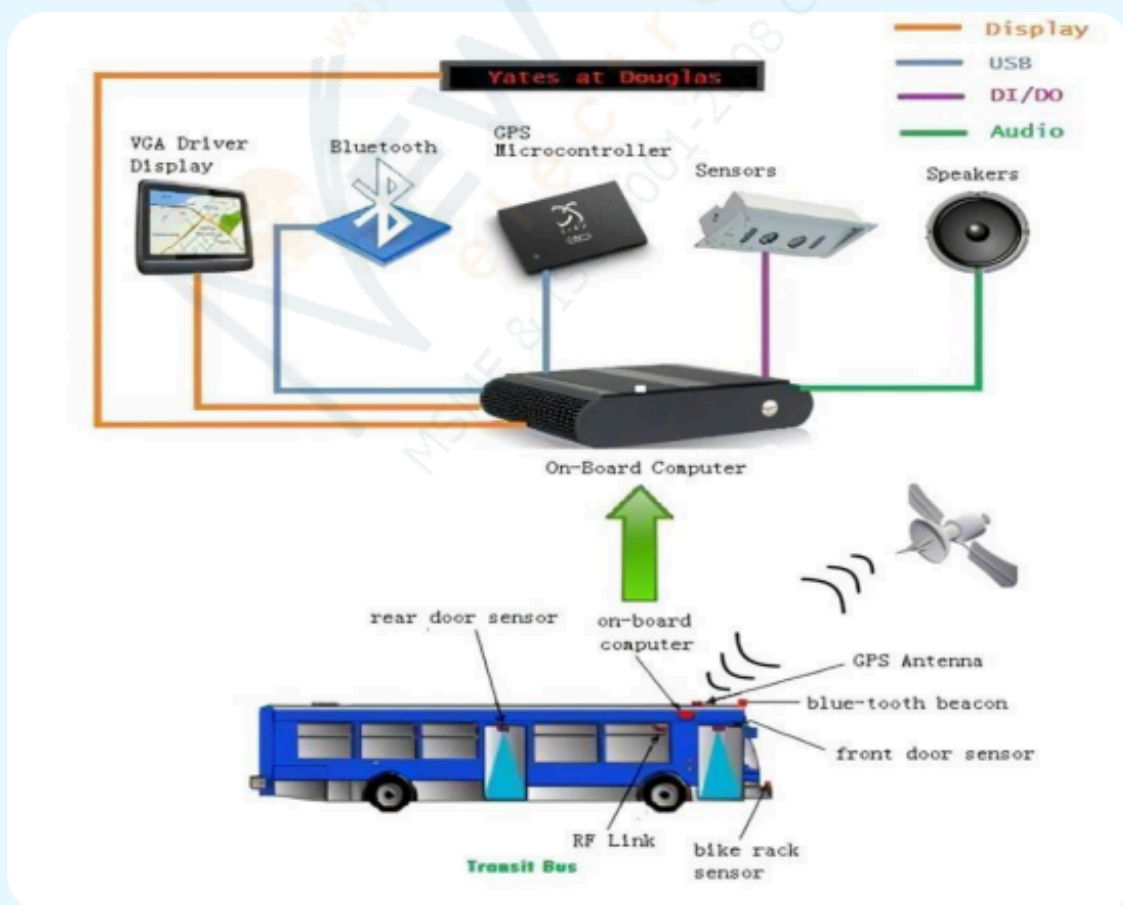
Public Information System:

The solution is fully integrated and hence can be linked to Android Based Mobile application which has complete Passenger Information System including status of current buses, Routes, Schedules, Bus stops, Distance and Fare Data.

Public Information can be achieved by flashing information of real time bus movement to the passengers.

1 st: Public Announcement System in the Bus: The GPS Device installed in the bus can be connected with Public announcement System of the Bus. This is normally part of the Driver Console and gets the feed from the inbuilt GPS device in the Bus. Or in case of non-availability of GPS system, driver can manually activate the voice enabled announcement system.

2 nd: Display of Information within the Bus / Bus Stops / Shelter Each GPS device of the bus by default will send the latest or the current Information of the Bus to the backend Servers. This in turn will communicate the information of each vehicle to relevant bus stop. This is converted to display or announcement system installed at the bus stop / depot / shelter as desired by the Corporation.



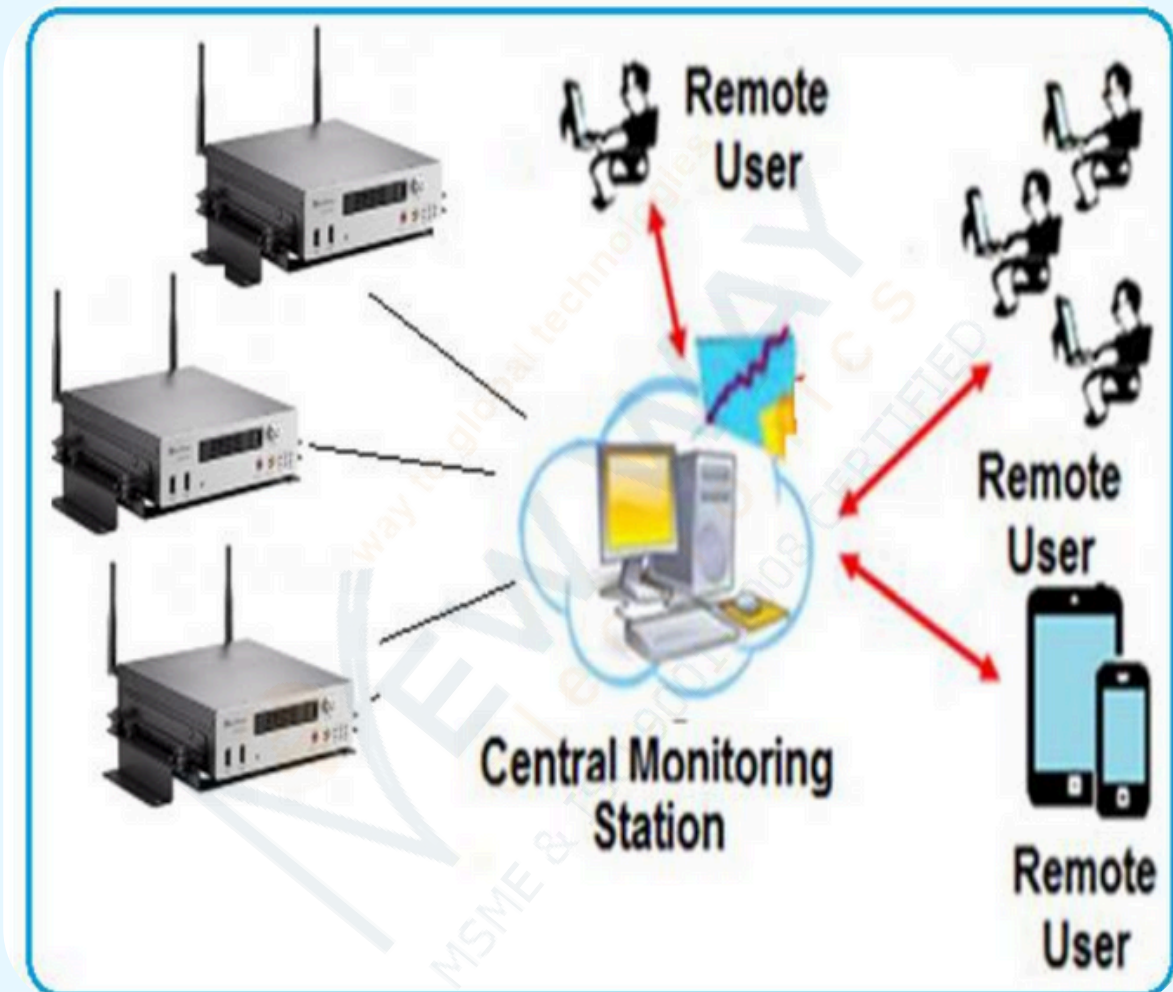


Mobile Ticketing and Passenger Information Application:

- 1) We can provide an Android Based Mobile application which has complete Passenger Information System including status of current buses, Routes, Schedules, Bus stops, Distance and Fare Data.**
- 2) User need to register with City / State Road Transport Corporation Services with minimum KYC data and should allow application to use their current location and minimum data desired so that the user can get access to the complete information related to trips, routes, schedules and ticketing and fare information.**
- 3) This application is a fully integrated solution and requires minimum touch points for selection of Location and Destination to get desired information as well as to make ticket booking.**
- 4) The application also provides access to current schedules and status of the buses on specific routes and they can access relevant data within 3 kms from their current status to have information on various incoming buses and track their movement if desired.**
- 5) The application is integrated with wallets like UPI, BHIM and Gateways for choosing various channels of options including banks, debit cards etc.**
- 6) The customer can choose to make payment using multiple channels. Payment receipt is acknowledgement by Corporation in the form of QR Code.**
- 7) This QR code is a confirmation for the passenger to board the desired bus. This QR code will be recognized by the ETMs carried by the conductor**

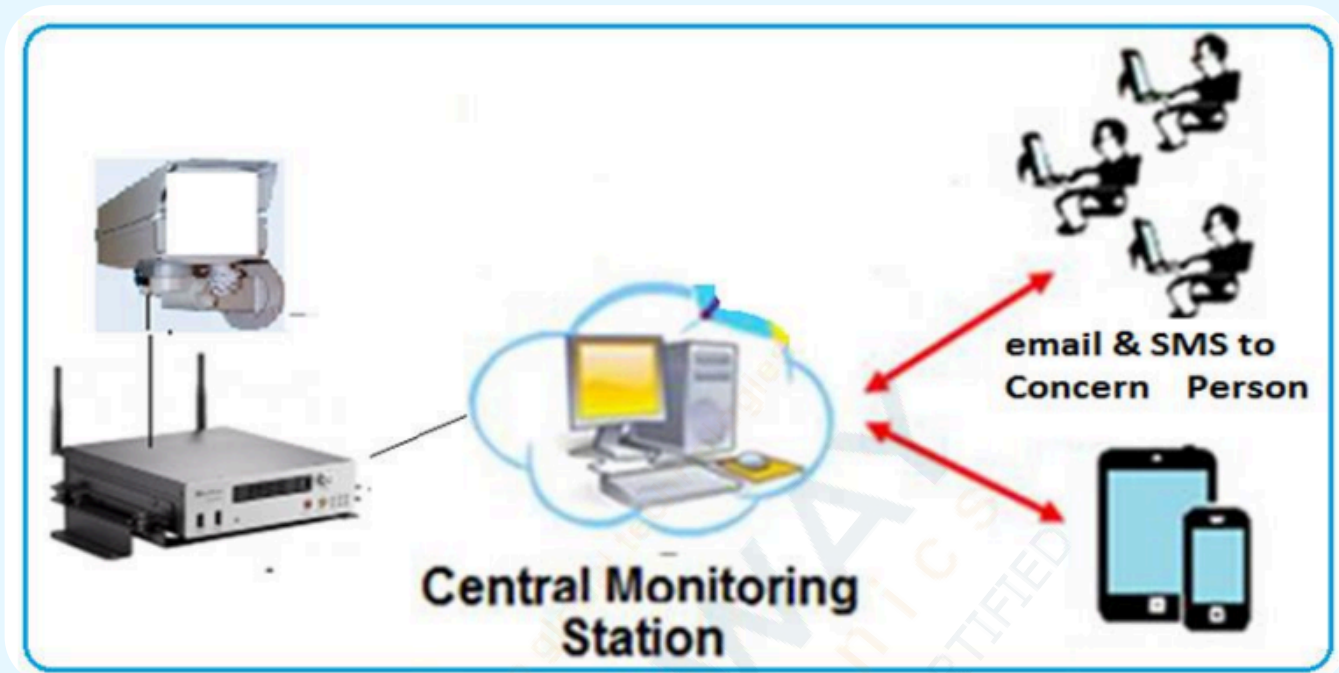
Bus Camera Solution

Remote Video Monitoring:



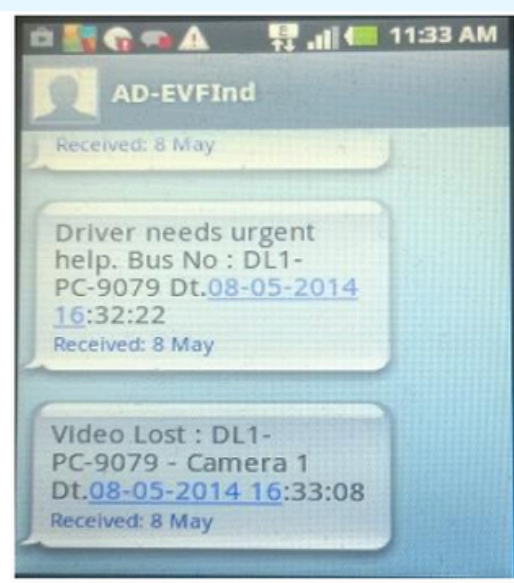
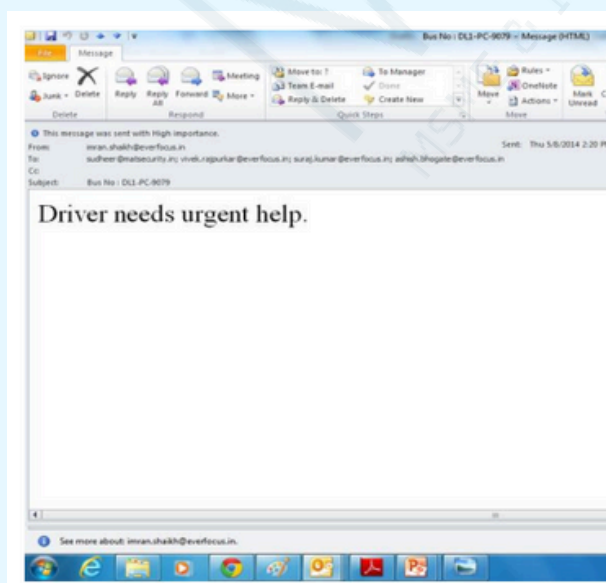
- Monitor Live View of Video Through Secured Login Id & Password,
- Local Recording Capacity up to 1 TB,
- Remote Replay of Recording

Alarm on Creating Hindrance:



- Alarms on Covering / Creating Hindrance in Front of Camera, Camera Tampering or Disconnection, Camera Restore & Pressing Panic Switch

Alarm Alerts Email & SMS:





Daily Report Format:

Dashboard | Route Replay | Reports | Geo Fencing | Control Panel

Welcome , admin | Sign out

Select Device: DemoDevice

From Date: 08/05/2014 15:02

To Date: 08/05/2014 17:00

Show

Device Status Report

Disk	Disk1	Disk Temperature	43 C / 109 F
Health Status	OK	Disk Size/Total	500.1
Record Time(Start)	12/04/2014 09:58:15	Disk Size/Usage	172.3
Record Time(End)	08/05/2014 17:00:00	Video Loss Duration	00:01:14 (HH:MM:SS)
Date(DD/MM/YYYY)	Video Loss		Panic Alarm
08/05/2014	YES		YES
Video Loss details for 08/05/2014			
Video Loss between 15:00:00 to 15:29:59			
Channel	Start Time		End Time
Total			00:00:00
Video Loss between 15:30:00 to 15:59:59			
Channel	Start Time		End Time
3	15:34:53		15:35:12
3	15:35:30		15:35:46
Total			00:00:35
Video Loss between 16:00:00 to 16:29:59			
Channel	Start Time		End Time
Total			00:00:00
Video Loss between 16:30:00 to 16:59:59			
Channel	Start Time		End Time
1	16:33:07		16:33:46
Total			00:00:39
Panic Alarms for 08/05/2014			
Channel	Time		
1	14:11:56		
1	14:14:00		
1	14:18:55		
1	14:19:11		
1	14:19:40		

- Auto Generated Daily Report Contains System Health (HDD Temp., cameras), All Type of Alarms, Total Duration of Video Loss,
- Auto Generated Daily Report get Sent to Pre Defined Email IDs Without any Manual Interference on predefined schedule
- System can Generate Reports as per the Selected Time Frame

