Chemito Backend Solution



Features

1. Vehicle Health Monitoring and Diagnosis

Support VHMD over CAN and real-time vehicle operational status, with intelligent alerts for alarms, events, and panic button triggers.

2. Surveillance System

Support live video streaming and recording over 4G to ICCC, with remote monitoring from ICCC. Enables auto/manual download of MDVR footage via USB/WiFi/Ethernet using BDC, laptop, or desktop client applications.

3. Two-Way Communication

Support audio communication between driver and Integrated Command and Control Center (ICCC) for realtime updates and improved safety.

4. Automatic Vehicle Locating System (AVLS)

Support real-time vehicle tracking and geofencing for route compliance and enhanced monitoring.

5. Passenger Information System (PIS)

Support remote route selection and onboard announcements directly from ICCC without driver console intervention.

6. Master Management Modules

Support centralized control of Bus Master, Depot Master, and Driver for smooth backend operations.



7. Firmware Over The Air (FOTA)

Support remote firmware updates for onboard units, ensuring all devices are up to date without manual intervention.

8. User Management System

Support role-based access control and user authorization to secure system usage across all modules.

9. Inventory Management

Support complete inventory workflow including Parts, Items, Inward/Outward tracking, detailed stock records, and report generation for better resource planning.

10. Ticket Management System

Specifications

- Cloud-Based Server Architecture
- MySQL & MongoDB Database
- N buses Data will be handle based on the Server Configuration.

Overview

Our backend integration system is the technological backbone of the Intelligent Transport System (ITS), designed to connect buses MDVR and control centers in real time. It acts as a centralized platform that collects, processes, and manages various data including GPS, CAN, PIS, and communication modules. real-time data streaming, and a scalable architecture, the system ensures uninterrupted communication between buses and Integrated Command and Control Center (ICCC). From live tracking and health diagnostics to video surveillance and route management, our backend integration bridges the gap between on-ground operations and centralized

Decision making enhancing efficiency, safety, and passenger experience.