AGIL®

Autonomous Vehicle Fleet Management System

ST Engineering

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One Platform for Multiple Autonomous Fleets

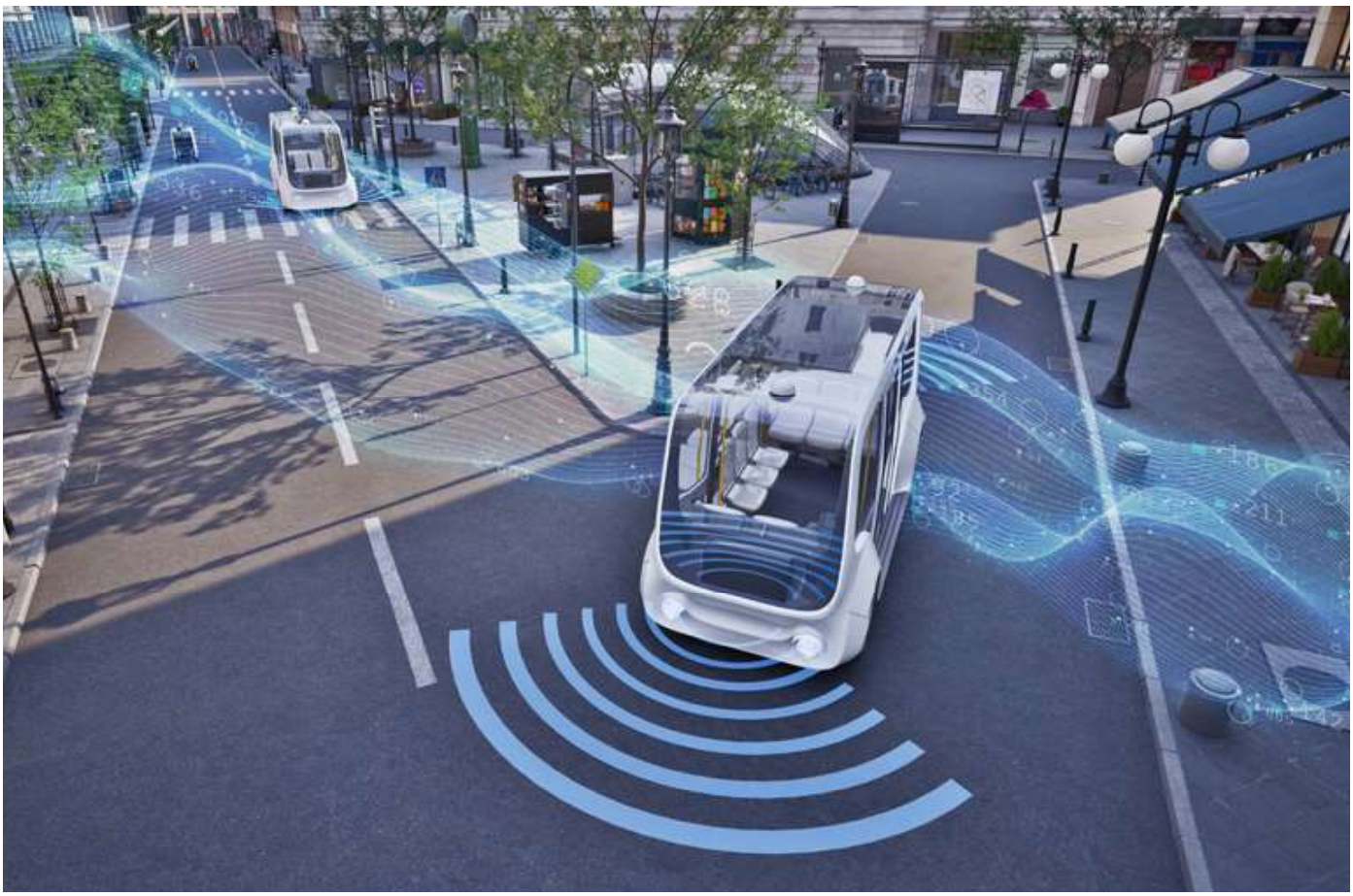
Managing a multi-brand autonomous fleet is challenging, as conventional fleet management systems often cater only to specific autonomous vehicle (AV) manufacturers. This leads to inefficiencies, vendor lock-in, and complexity in controlling AV-specific parameters.

Brand-Agnostic, Integrated, Future-Ready

ST Engineering's AGIL Autonomous Vehicle Fleet Management System (AVFMS) provides a brand-agnostic solution that integrates the operation and management of disparate AV makes and models under one platform. It enables seamless monitoring, control, and optimisation of multiple fleets.

For operators who manage AV fleets across multiple locations with unique operational needs, the AGIL AVFMS offers a scalable, secure solution that ensures data remains within the intended jurisdiction, regardless of the geographical locations of the AV fleets.

The AGIL AVFMS is also suitable for both public and private transport. It enables full command and control over disparate AV fleets, supports secure integration with third-party data, and ensures efficient delivery of transport services — whether on-demand or fixed-route scheduling.



Key Benefits

Efficient, Secure and Reliable

Comprehensive End-to-End Solution

The AGIL AVFMS is an advanced fleet management system that integrates AV software and hardware with robust cybersecurity measures, and leverages AI and advanced analytics, to ensure optimal fleet performance for more efficient, safer journeys.

Enhances Operational Efficiency and Reduces Costs

For the operator, the AGIL AVFMS enhances operational efficiency and reduces costs by streamlining fleet management on a unified platform, optimising route scheduling and improving energy efficiency. This leads to lower fuel consumption, reduced downtime and better resource utilisation. It is especially suitable for large, multi-site AV fleet management.

Improves Passenger Journeys

The AGIL AVFMS enhances passenger satisfaction by supporting mobility-on-demand services, offering flexible, user-focused transport options. It accommodates dynamic changes on the road with real-time tracking and route optimisation to deliver timely transport services.

Deep Domain Expertise and Reliable Support

With extensive engineering and technology expertise in deploying public and private fleet management, we offer trusted system support, ensure full data sovereignty and reduce the complexity of managing multiple vendors with incompatible systems. This enhances security and ensures the delivery of faster, more responsive and safer AV fleet services.

Key Features

Mobility-on-Demand Services
for Greater Flexibility

Optimises AV dispatching by matching incoming user requests to available vehicles. It factors in variables such as proximity, battery levels, and traffic conditions to ensure AVs are despatched efficiently and safely. It reduces wait times and enhances fleet utilisation, offering dynamic, flexible services that adapt to real-time demand.

Fixed-Scheduled Services
for Timely Journeys

Automates vehicle scheduling, ensuring timely, reliable service across fixed routes. It accounts for variables such as maintenance schedules and external traffic data, optimising routes to reduce energy consumption and minimise travel time. It is ideal for high-volume, predictable services in urban environments.

Secure Video Feeds
for Intelligence-Driven Detection

Enables fleet operators to remotely monitor the interiors and exteriors of AVs through live video feeds. It enhances safety and operational oversight, enabling quick incident response while ensuring strict compliance with safety regulations. The feeds can be encrypted for privacy and integrated with AI for accurate anomaly detection, such as spotting obstacles or unauthorised access.

AV-Agnostic Architecture
for Unified Management

Designed to manage AVs from multiple manufacturers, the AGIL AVFMS enables fleet operators to mix and match vehicle types without being tied to a single brand. It uses standardised protocols and APIs to seamlessly integrate management of various vehicles. This ensures flexibility, cost savings through competitive sourcing and ease of system upgrades without vendor lock-in.

Real-Time Visibility
with Integrated Dashboard

Provides real-time visibility of vehicle locations, status, and performance metrics via a centralised dashboard. Using GPS, telematics, and IoT data, fleet operators can track key metrics such as battery levels, passenger occupancy, and estimated arrival times. It provides quick adjustments to schedules, avoiding traffic bottlenecks, and improving fleet efficiency.

Notifications & Alerts
Powered by AI

Generates automated alerts for key events such as vehicle malfunctions, low battery warnings, or route deviations. Alerts are prioritised using AI and can be sent via email, SMS, or push notifications. It provides customisable escalation protocols that ensure critical issues are addressed quickly, minimising downtime and enhancing safety.

Multi-Site Operations
Managed by One Platform

Supports the management of fleets across geographically dispersed locations from a centralised platform. It handles site-specific configurations, such as local regulations, charging infrastructure, and demand patterns, while offering global oversight. It optimises resource allocation across multiple sites, vehicle transfers, and schedule synchronisation, ensuring operational efficiency across diverse locations.

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