

Fleet Essentials

Secure and targeted access to the data and services of defined fleet vehicles for selected OEM business customers

Fleet Essentials provides car makers the key elements of data processing and managing fleet structures and permissions in order to make connected car data and services available to their business customers. The product offers flexible connected car integration options and provides APIs that enable OEM business customers to build solutions with the features that their end users need. All the data collected provides opportunities for data analysis and a better understanding of how/where cars are used on an aggregated level. This greater visibility of vehicle health and usage leads to increased vehicle utilization and safety as well as better operational effectiveness for the business customers of the OEM.

The Future of Mobility

Car makers are changing their business models and focusing on a sustainable future for both their businesses and the environment. There is an opportunity to simultaneously increase revenue and reduce the environmental impact by increasing the number of vehicles that are driven in different fleets with a higher utilization rate. At the same time, an increasing number of vehicles are being driven by people who are not the registered owner, and ownership is shifting from private persons to commercial entities. New mobility services are continually appearing on the market and there is a constant influx of new ideas and functionalities offered to consumers.

With these ever-evolving circumstances, car makers face several challenges in offering safe and useful services:

- To support the transition from ownership to user-ship, access to vehicle data must be managed in a secure way so that only those who are meant to access information can see it.

- Car makers must be able to manage connected groups of vehicles and to resolve roles and rights for the OEM business customers.
- Vehicles need to be divided into logical vehicle groups based on the business logic used by the OEM's customer (e.g., geography, models, powertrain, etc.)
- The work processes must be efficient throughout the entire flow from the car maker to the end user, both to achieve profitability and to create a good customer experience.
- The solution should not be locked-in for the car maker. Rather, it should stimulate high usage by different actors, including rental companies, leasing companies and the car maker itself.

All of this calls for a new way of doing business, and of managing vehicles, data and services created by the OEM in a flexible and efficient way.

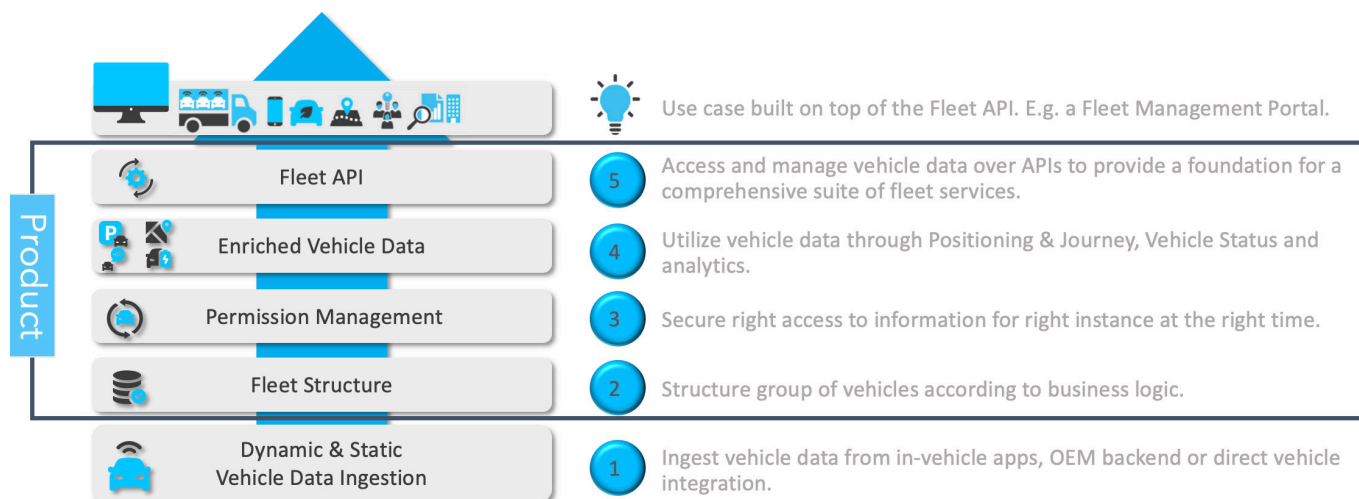
Why Fleet Essentials?

On average more than 60% of OEM vehicles are sold into the B2B channel. Many of these vehicles become part of a fleet, whether it is an OEM test car fleet, leasing company, rental car company, mobility provider, or other fleet-based service models. Regardless of the owner and fleet type, there are a few common areas of concern:

- Increasing usage and realizing ROI
- Reducing environmental impact and CO2 emissions
- Efficiently managing the health and location of assets
- Building attractive pricing models and features for end users

To address these areas of concern and to obtain visibility of individual vehicles in the fleet; connectivity, data, and fleet-centric services are key. Fleet Essentials provides services that enable a fleet of vehicles to be organized in a structured way. Roles and rights to access vehicle data are managed while data and services are delivered securely to any business customers.

Our API makes it possible for the OEM to give access to the vehicle data to mobility providers or fleet management providers. There is no locked-in solution for one specific fleet management portal. This allows OEMs to offer a rich set of features that improve operational excellence, strengthen brand loyalty, and provide positive user experiences.



Key Capabilities and Features

Fleet Structure Management

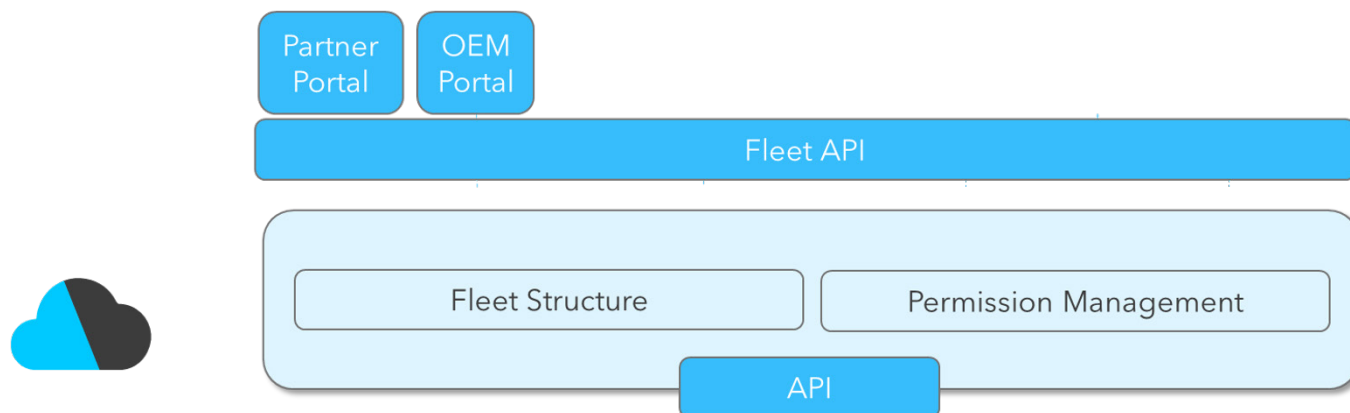
As an OEM, ensuring successful management of the B2B business and assets is key. The **Fleet Essentials portal** and **Fleet Essentials APIs** enable you to establish the top level of your customers' fleet structure and infleet/defleet vehicles.

Permission Management

The permission management features allow you to assign access to the services and features according to your defined business agreement with the fleet owner.

The **Fleet Essentials portal** is a Graphical User Interface that visualizes the fleets and fleet structures and enables critical fleet administration. The OEM's Sales team uses this portal to establish the necessary relationships in the system between the fleet owner and the connected vehicles of that fleet. The portal also allows the OEM to manage access to the fleet structure and set up permissions for which services and data the OEM business customer can view and use within their fleet(s).

We do not believe in locking in how the fleet manager portal should be visualized. Therefore, a fleet API is included that is easy to consume for the OEM's business customer. We also have a network of partners for fleet manager portals that suit different markets and needs.



Flexible Ways to Ingest Vehicle Data

Do you already have a connected car backend or are you starting from scratch? No matter your starting point, we provide different product packages that support getting data and services from the cars into our cloud. This can be done via an existing OEM backend, directly from the vehicle via a telematics control unit, or even via an Android Automotive OS in-vehicle application. This flexibility enables even OEMs with multiple legacy systems to consolidate, manage and view these vehicles inside our fleet structure. Since the complexity of the vehicle integration is encapsulated in WirelessCar's solution, your developers can focus on adding value for the company and its users.

APIs for Data Consumption

The Fleet Essentials APIs support business customers to integrate the fleet and connected car data and services into the company's processes and systems. As a result, fleet owners and operators can benefit from a rich set of tools and capabilities to manage and access data from the vehicles as well as work with their fleet structures.

- The APIs enable access to data that allows for visibility of vehicle usage, location, and alerts and notifications based on specific health indicators from the car.
- As an optional addition, execution of those services that have been enabled for the fleet (e.g., geofencing, immobilization, climate control, and door lock/unlock) becomes possible.

- OEMs and their business customers have access to a developer portal which provides guidance on how to use APIs and build use cases that add value to your business.

Secure Data & Services Processing

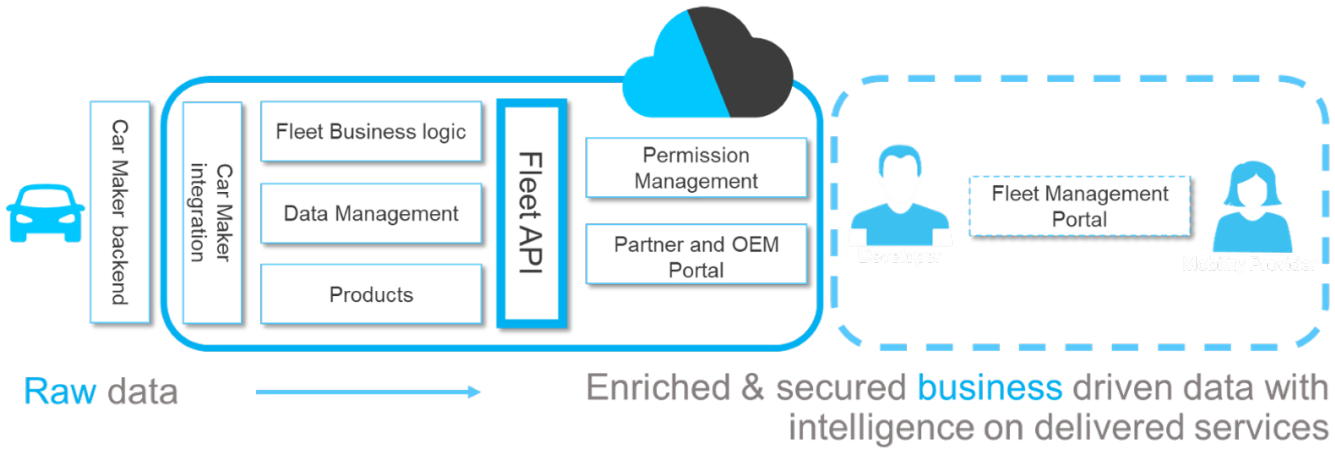
A core element of Fleet Essentials is the secure and efficient processing of different data types:

- **Static data** generally consists of descriptive data about the car, its VIN, make, model, color, etc.
- **Dynamic data** comes from the car at varying frequency when the car connects to the backend and communicates its status and whereabouts (position, speed, heading).
- **Status data** generally includes information about odometer, fuel/battery level, tire pressure, windows, locks, doors, and various other sensor data.
- **Service warnings** may also be collected and stored (e.g., low brake fluid levels, low battery charge and other fault codes).
- **Connected services** are unlocked, delivering advanced business opportunities. As an example, a rental company can locate a vehicle at a given point-of-time or trigger a remote AC ON before releasing a vehicle to an end customer.

All data is collected, encrypted, and stored according to the highest security standards with respect to the region where the vehicle is operational (EU, US, China).

Developer Portal

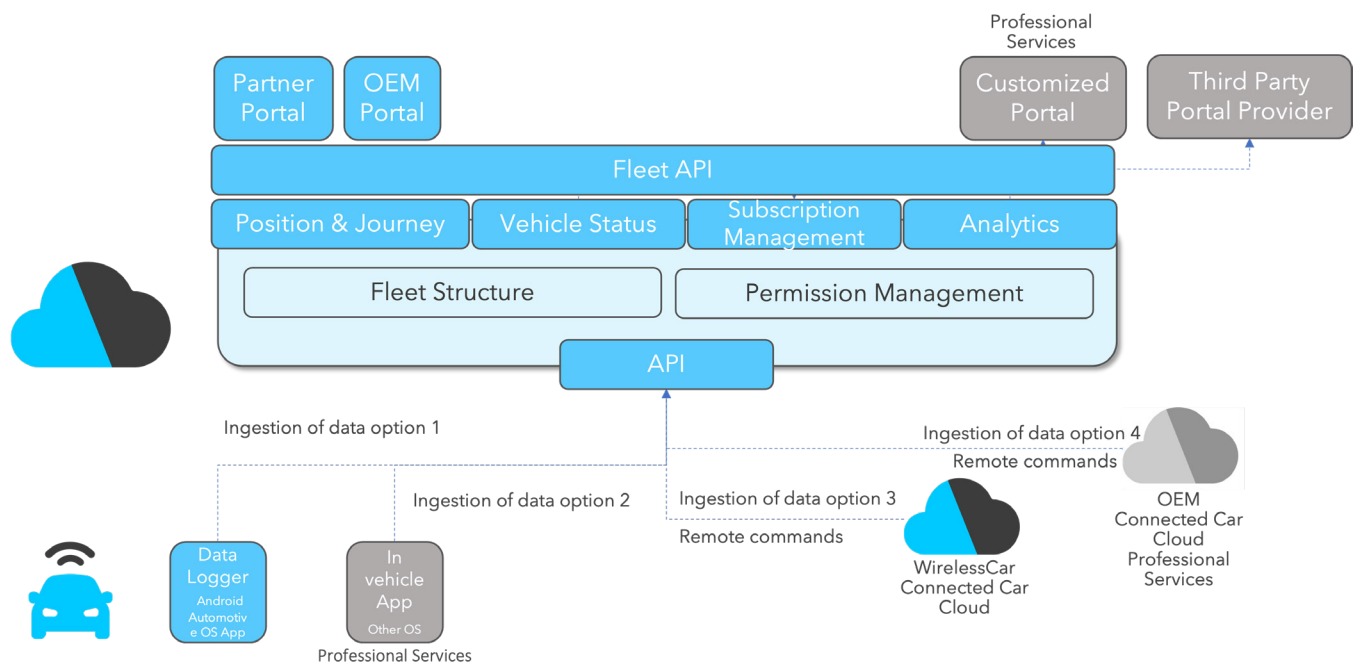
The developer portal provides all the necessary information and know-how to get started using the API’s features. Here, you will find documentation about how to get started and use the end points to support your business processes. Your integration efforts are supported by examples, FAQs and clear guidelines for request/response format and data.



The Benefits

Fleet Essentials builds on our fleet-ready, cloud-based backend products and services. As an OEM you benefit from using our proven building blocks as a part of your solution and decreasing time to market for your connectivity offerings towards your business customers.

Simultaneously, you gain the ability to expand your offerings over time based on a secure and highly scalable solution. You have control of the connected service offerings that you want to deliver and the data you want your business customers to be able to utilize within their fleet systems. By reducing their need for external dongles and the logistics and expense of managing extra hardware, their total cost of ownership is reduced.



Example of optional datapoints used in the product

Status Package	Remote commands	Data analytics
<ul style="list-style-type: none">• Mileage (Odometer)• Position (latest known position)• Fuel/charging level (percent)• Lock status (no remote actions)	<ul style="list-style-type: none">• Remote services: Lock/unlock (command)• Climatization• Immobilization• Geofence	<ul style="list-style-type: none">• Aggregated data <p>Average consumption (diesel, petrol and electricity) And average miles</p>

Fleet Essentials provides:

- **Global reach:** Currently, our services support most markets in the world including North America, the European Union, and China.
- **Designed for scale:** As the number of vehicles increases, so does the amount of data. Our products are designed to support large amounts of data and are built to secure scalability.
- **Respect for privacy:** How, when, and where vehicles are driven can be sensitive data. All data is tagged according to data privacy regulations and securely encrypted and stored.
- **Designed for the mobility industry:** Our solution focuses on digital services for connected cars. Our products are fully designed for any mobility use cases.

Cybersecurity & Data Protection

At WirelessCar cybersecurity and data protection is in our DNA, meaning we apply the secure by design principles to address the unique characteristics of the connected car and its services. We work proactively against any potential threat by leveraging our twenty years of experience in the domain, proven by being ISO27001 and VDA-ISA certified as well as following NIST and UN R155 regulations for cybersecurity and privacy controls.

We build our applications and services based on DevSecOps, making security an equal partner alongside development and operations; and we leverage our cloud partners such as AWS and Azure to help our architects build secure, high-performing, resilient, and efficient infrastructure for our applications.

About WirelessCar

WirelessCar is one of the world's leading innovators of digital vehicle services. We accelerate service creation and turn vehicle data into business value for consumers, mobility providers, vehicle makers and society. Founded in 1999, WirelessCar has continuously built upon our heritage and grown our expertise within the automotive industry. Today, we are a highly recognized and award-winning company, connecting more than nine million vehicles in over 100 countries.

Headquartered in Sweden, with offices in the US and China, WirelessCar works with OEMs such as Volkswagen, Jaguar Land Rover, Daimler, Nissan, Subaru of America, and Volvo Cars to leverage the full value of connected services to achieve smart, safe, and sustainable mobility.

To learn more about WirelessCar's Fleet Essentials, [visit our website](#) or contact us directly to book a meeting or demo.

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