

# Stratio Platform for Public Transport fleet operators



 Fault Alert Turbo

 Vehicle Location

 9.2 Driver Score

 System Indicator Brake Pads

 Predictive Alert Oil Pressure

The dashboard displays the following information:

- Vehicle Details:** Vehicle #1 - BUS - Volvo FH 38 2017
- Driver Performance:** Today's Top Drivers list includes Tuomo Caldeira (8.7), Pedro Matos (8), and Worst of the day (5.7). A large green circle highlights a score of 9.2.
- Operational Metrics:** Total Operation time, Mileage (Average Speed), Mile Time, Average Fuel consumption, and Fuel.
- Alerts:** Three alerts are shown, including 'Throttle pedal repeat' and 'Throttle pedal position has been above 90% for more than 20 seconds'.
- Map:** A map showing the vehicle's route through a city street grid.

# Your Buses matter

We understand how important it is for you to optimize your bus operations by ensuring you transport your passengers without disruptions to make your business more profitable. Stratio is your partner in this mission by supporting you in key areas of your business.



## maintenance

Leading Predictive Maintenance solution using Artificial Intelligence to empower your team and keep your vehicles on the road

- Remote Diagnostics
- Predictive Maintenance
- Automated Maintenance

## operations

Smart Maps to give you better control over your fleet and ensure a fast and effective response to your customers

- Smart Maps
- Energy and Fuel Consumption

## ecodriving

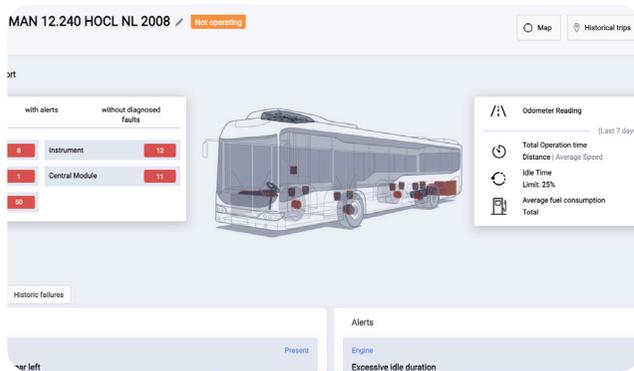
Intelligent performance metrics to improve driver's behaviour with the only multi-brand ecodriving system

- Drivers and Vehicle Scoring
- Metrics for Coaching Drivers



# Maintenance

Leading Predictive Maintenance solution using Artificial Intelligence to empower your team and keep your vehicles on the road.



## Remote Diagnostics

Just like having the most advanced diagnostics equipment in each one of your vehicles operating 24/7.

Vehicle	Battery Status	Current Voltage	Last Reading	Operati
TRUCK - Mercedes-Benz Actros	Needs Recharging	27.68	13/05/2020 17:08	Not o
REFUSE TRUCK - Volvo FM9	Replace	24.87	Now	Not o
TRUCK - DAF XF FT430	Good	25.21	Now	Not o
REFUSE TRUCK CNG - Volvo FE	Good	25.59	Now	Not o
COACH BUS - Volvo B12M	Good	27.41	Now	Oper
CITY BUS - Scania OmniCity	Good	27.71	05/04/2020 20:43	Not o
CITY BUS HB - Heuliez GX 337	Good	27.89	Now	Oper

## Predictive Maintenance

Check the condition of your key vehicle components and replace them before it is too late.

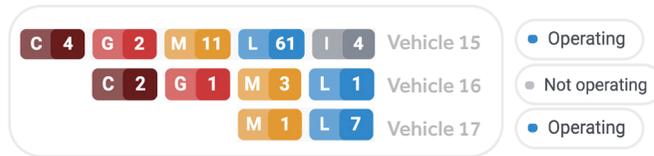
## Automated Maintenance

Vehicle mileage and operating times are now automatically recorded to receive alerts when the next service is due.



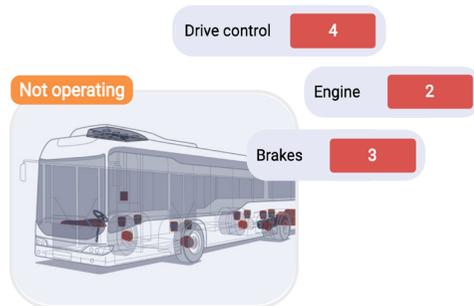
# Remote Diagnostics

## maintenance



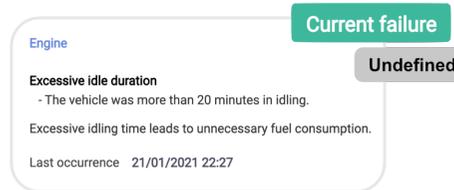
### Fleet overview

See the DTCs (fault Codes) and customized alerts active in your vehicles as well as their severity



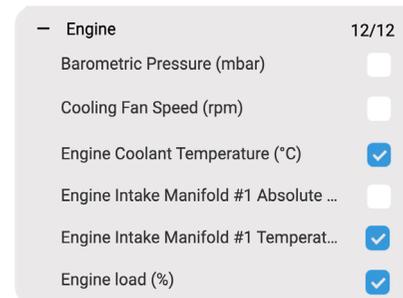
### Vehicle overview

See each vehicle record containing key data, from mileage to fault codes and alerts



### Diagnostics Trouble Codes

See each fault code description, including where it happened, similar past fault codes and steps for troubleshooting



### Customized alerts

Access the active alerts you configured with a graphic visualization of thresholds



*'The Stratio Platform enables real-time fault detection and predictions for our buses. This allows for timely repair recalls with the workshops being alerted before actual breakdowns happen - reducing the occurrence of bus breakdowns in the process.'*

**SBS Transit**

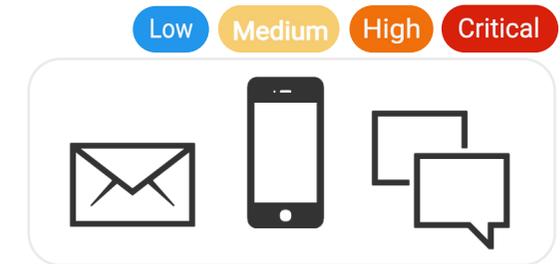
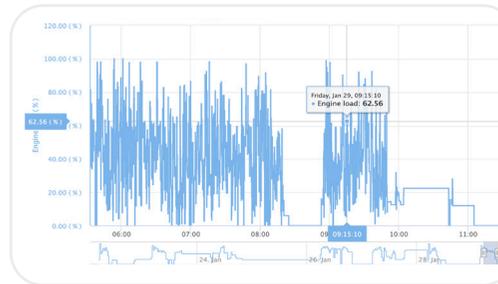
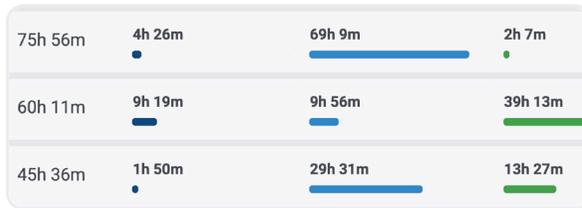
**Ang Soon Yeong**

Head of the Bus Engineering Systems & Technology Department | SBS Transit



# Remote Diagnostics

## maintenance



### Metrics

Understand key maintenance metrics such as range of operating coolant temperatures

### Sensor readings

See and compare sensor behaviour or monitor them in real-time

### Real-time notifications

Receive SMS, email or web notifications of your alerts



*'By using Stratio Platform we are able to discover a possible failure before it occurs, plan our maintenance and use our fleet more effectively.'*



**Radovan Ředina**

Project Manager | Arriva Czech Republic

*we are able to discover a possible failure before it occurs*

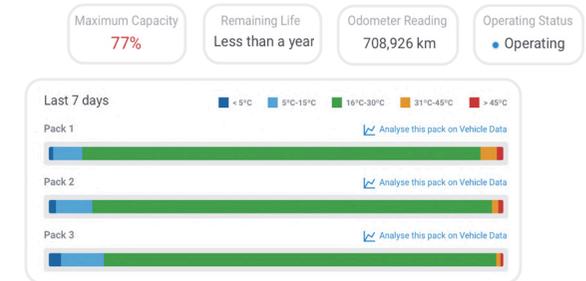
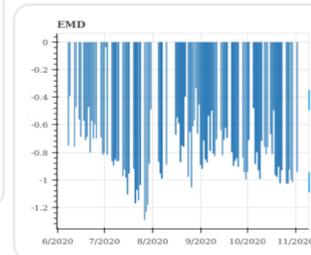
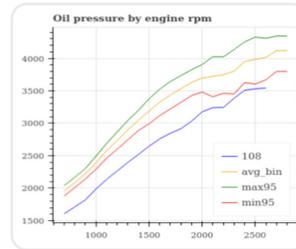


# Predictive Maintenance

maintenance

The world's leading predictive maintenance solution <sup>6</sup>

Volvo FH38 4X2 2007	⚠️ 38,400	● Not operating
Heuliez GX 337 HS6	🔋 > 50,000	● Operating
E1222.JSH - Global	⚠️ > 50,000	● Not operating
Volvo B12M 2006	🔋 > 50,000	● Operating



## Monitor wear and tear

Know the date or mileage of wear and tear components such as starter battery and brake pads

## Avoid breakdowns

Receive a report every time there are early signs of malfunction in major components such as the turbo and the engine

## Future proof

AI fault detection models ready for hybrid and electric vehicles

*'Email alerts are great and allow us to process vehicles before they break down. Good visibility of the event (place, time, etc.) with the possibility of viewing several sensors and comparing the graphics. This allows a precise pre-diagnosis to be made before working on the vehicle.'*



Jérôme Datin

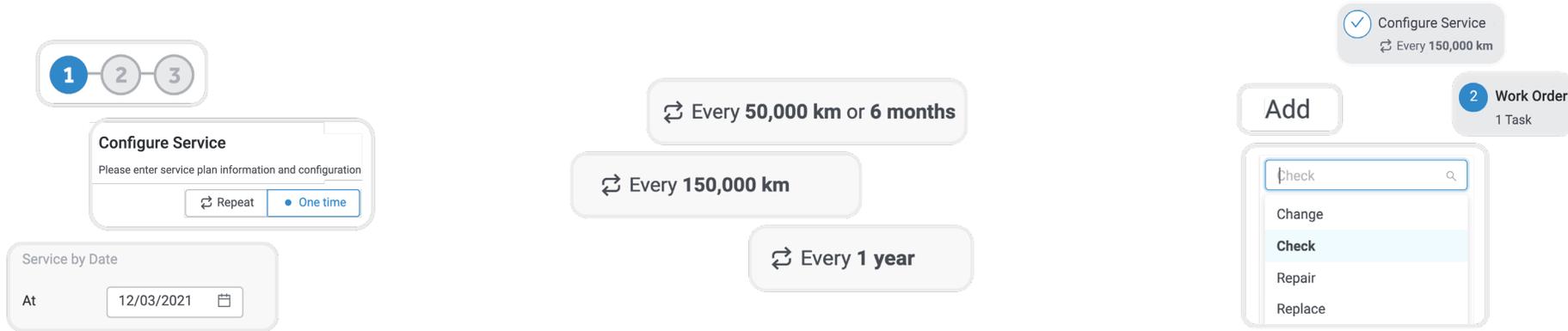
Workshop technician | RATP



# Automated Maintenance Plans

maintenance

Your plans can be automatically adjusted with faults detected by remote diagnostics and predictive maintenance



## Create plans

Create maintenance plans of recurrent tasks based on mileage or time

## Control dates automatically

You no longer need to check mileage or time, they are updated automatically

## Adjust easily as you go

Add tasks to replace or repair components based on predictive maintenance alerts and reports

*'To take the next quality step in our service and be able to offer predictive maintenance, and after evaluating many options, we finally made the right choice by choosing Stratio.'*

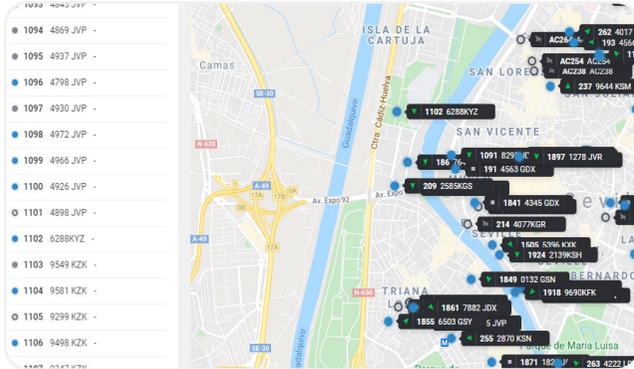


**Manuel Rosendo**  
Maintenance Director | TUSSAM



# Operations

Smart Maps to give you better control over your fleet and ensure a fast and effective response to your customers.



## Smart Maps

Track and manage your vehicles all in one place.

Vehicle	Engine	Average (L/100km)	Total (L)	Time	Ratio	Performance (%)	Travelled Distance (km)	Operation Time (h:mm)
Mercedes-Benz Actros 2019	Diesel	30.5	1,526.1	8h 6m	9%	0	5,010	77h 51m
Volvo FH-400 2009	Diesel	48.3	1,481.1	20h 30m	19%	↑ -10	3,066	100h 22m
Mercedes-Benz Actros 2019	Diesel	27.7	1,435.4	6h 19m	7%	↓ 2	5,177	78h 54m
DAF XF FT430 2019	Diesel	29.4	1,432.4	6h 37m	9%	↓ 5	4,878	65h 39m
DAF XF FT430 2019	Diesel	25.8	1,408.4	9h 43m	11%	↓ 3	5,455	82h 8m
Mercedes-Benz Actros 2018	Diesel	29.0	1,372.1	2h 51m	3%	↓ 11	4,733	60h 1m
Mercedes-Benz Actros 2017	Diesel	32.8	1,317.7	46m	1%	↓ 9	4,013	66h 55m

## Energy and Fuel Consumption

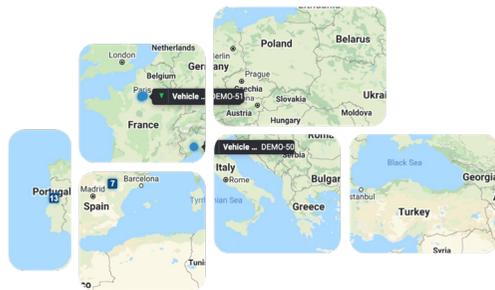
Follow remotely the energy consumption of your bus to keep track the fuel consumption and other metrics.

*Smooth trips  
Safe routes  
No delays*



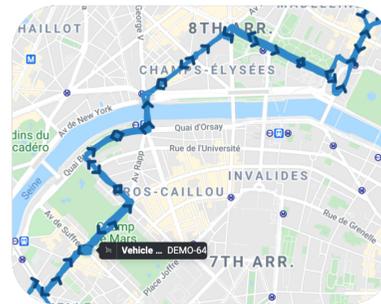
# Smart Maps

operations



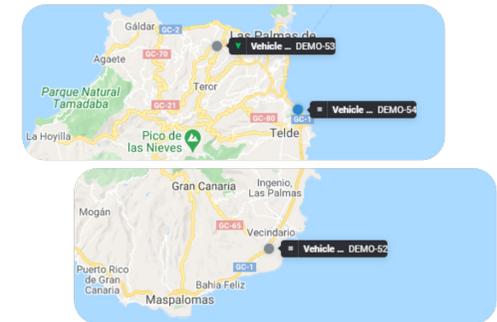
## Locate vehicles

See all your vehicles in real-time, as well as your drivers (enabled by available add-on)



## See vehicle direction

See if the vehicle is already heading in the right direction to a specific bus stop



## Find nearby vehicles

Click on any location and see which one of your vehicles is closest to it

*Track and manage your vehicles all in one place*



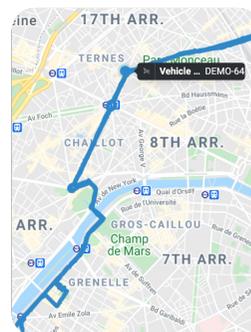
# Smart Maps

operations



● **Vehicle 64**  
CITY BUS HB - Heuliez GX

📍 06:01  
📍 06:59  
📍 07:20  
📍 07:23



## Geofencing alerts

Get notifications when your vehicles enter and exit areas defined by you such as bus stops or workshops

## Explore trips

Search and see in detail any trips made by your vehicles and at which exact time they were at any given location

*Smart maps to give you better control of your operation*

*'Stratio's technology allows us to offer a better service to all of our passengers because we know that our fleet is equipped with an effective solution to minimize unplanned downtime, allowing us to better control our operations remotely and be more efficient.'*

**QVTâmega**

**Miguel Nogueira**

General Manager | Auto Viação do Tâmega



# Energy and Fuel Consumption

## operations

Vehicle Model	Consumption (L/100km)	Distance (km)	Alerts
Volvo FH38 4X2 2007			
Heuliez GX 337 HS6	61 L/100km	874 km	↓ 2
E1222JSH - Global	53.6 L/100km	2,302 km	
Volvo B12M 2006	45.1 L/100km	2,021 km	↓ 5
E1191JSH - Global	44.2 L/100km	3,035 km	↓ 3
	43.9 L/100km	591 km	

	Odometer Reading	65,860 km
	State of Charge	98.8%
		
	Total Operation time	61h 17 min
	Distance   Average Speed	749 km   12.2 km/h
	Average Energy Consumption	116.9 kWh/100km
	Total	1,301 kWh
	Regenerated Energy	34%
	Energy   Distance	441 kWh   242 km

Max Capacity (%)		
Good	97	> 10 years
Good	98	> 10 years
Good	99	9 years
Good	99	> 10 years
Good	100	> 10 years

### Fuel consumption

On internal combustion vehicles, we calculate consumption, idle performance metrics and alerts (according to fleet settings)

### EV energy consumption

In electric vehicles, we calculate the energy consumed and the energy regenerated

### Hybrid consumption

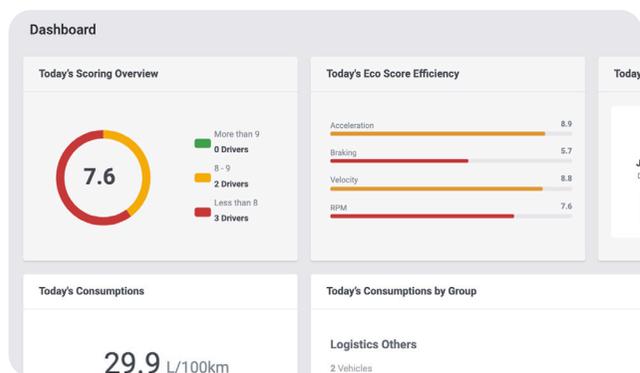
In hybrid vehicles, we calculate consumption and other relevant metrics

*Optimize your operation to get more deliveries  
to make your business more profitable*



# Ecodriving

Intelligent performance metrics to improve driver's behaviour with the only multi-brand ecodriving system.



Driver Name	Global Score	Acceleration Score	Braking Score	Velocity Score	RPM Score	Vehicles Driven	Consumption
Pedro Matos	8.2	9.4	5.3	9.6	9.2	1	31.4 L
Miguel Ribeiro	8.1	8.8	6.3	9.1	8.9	1	36 L
Hugo Valentino	7.9	8.6	5.5	8.9	9.2	1	44.1 L
	7.5	8.7	5.4	8.7	7.6	22	26.8 L
João Santos	7.4	8.0	4.3	9.4	9.3	1	28.8 L
Tiago Vaz	7.2	8.2	4.0	9.3	8.3	1	61 L

## Drivers and Vehicle Scoring

Just like having a performance manager helping the drivers and operators to make the necessary adjustments so they can perform at their best.

## Metrics for Coaching Drivers

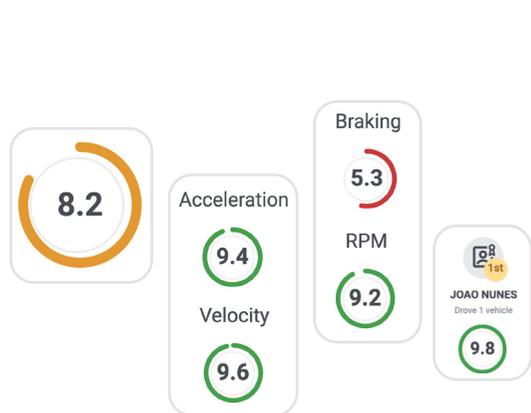
Supported by real data to help managers identify specific training needs.

*The only intelligent  
Ecodriving system  
for multi-brand  
fleets*



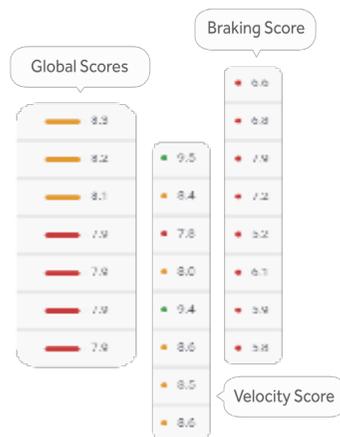
# Drivers and Vehicle Scoring

## ecodriving



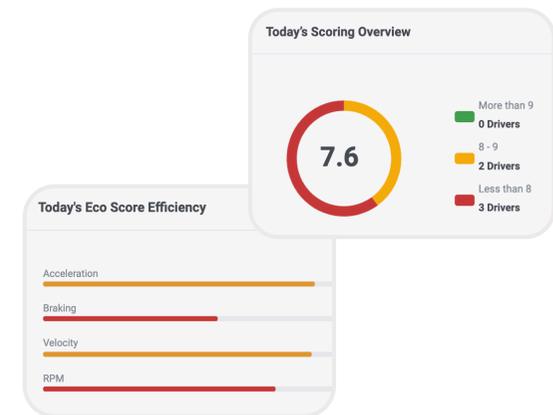
### Scoring by driver

Implement a fair scoring system for your drivers to make your fleet safer and more cost-effective (made available by add-on for driver identification)



### Scoring by vehicle

Get a clear visibility of fleet performance on any given operation profile regardless of driver's identification



### Ecodriving dashboard

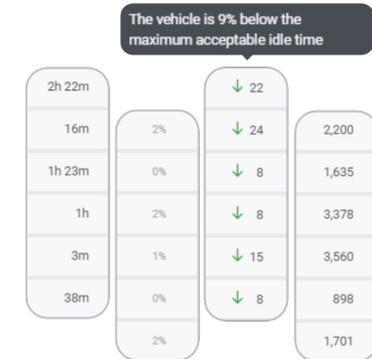
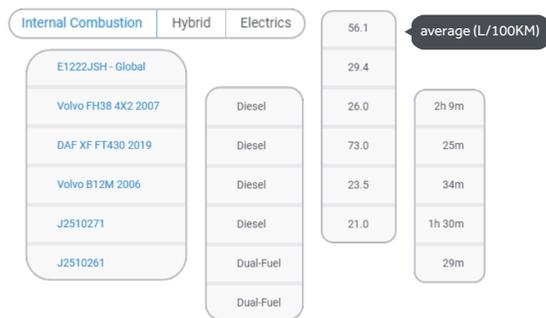
Get all the information you need to manage your vehicles' and drivers' performance in one place

*Support your drivers and operators to make the necessary adjustments to achieve the best performance*



# Metrics for Coaching Drivers

## ecodriving



### Vehicle fuel consumption

Get accurate readings and calculations for fuel consumption

### Throttle pedal usage

Understand drivers' performance to help you minimize wear and tear across your fleet

### Idle time performance

Ensure that you control and improve your fleet fuel consumption and operational efficiency

*Supported by real data to help managers identify specific training needs*



Want to know more?

**REQUEST DEMO**

