

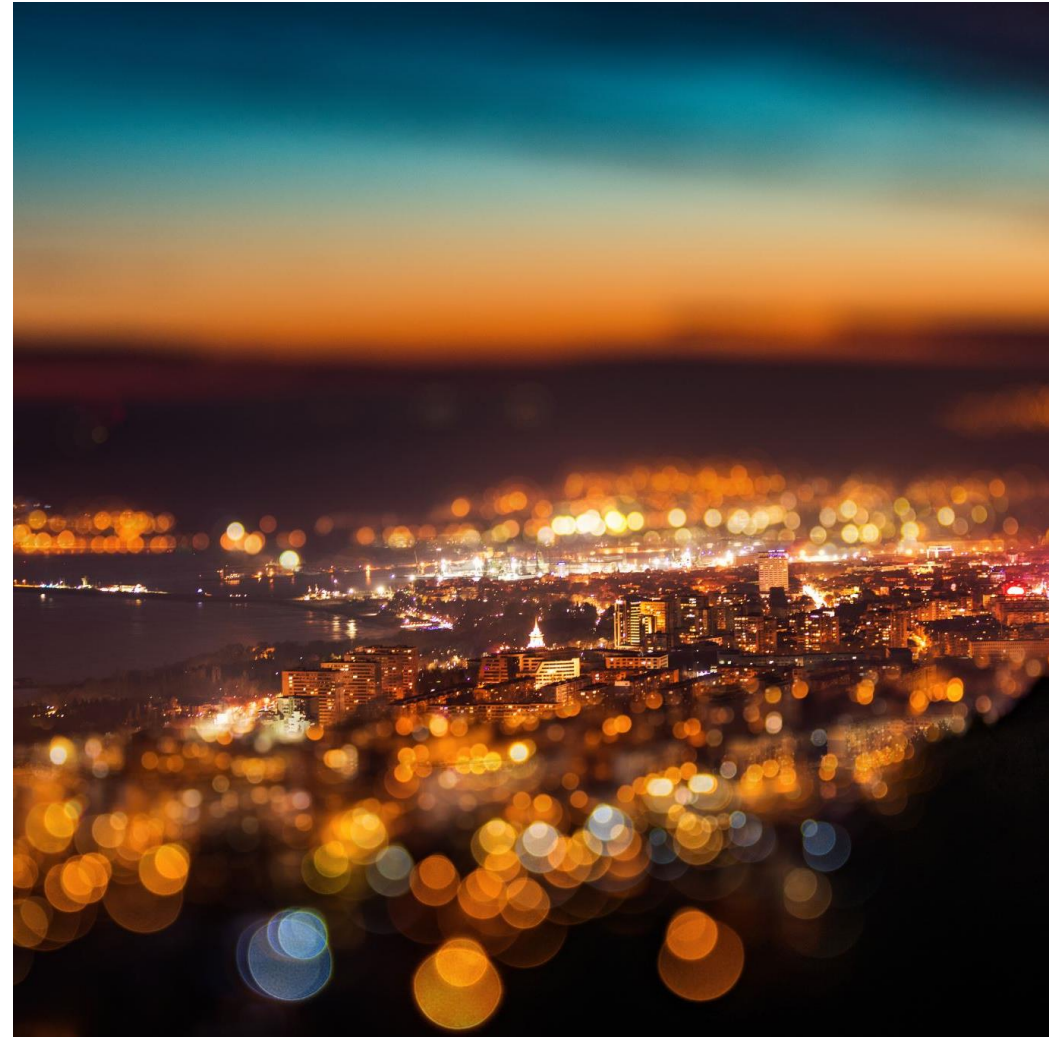


# Migration to Volvo Connect

Comparison to functionality in Fleet Management

# Content

1. Where to find key Fleet Management tools in Volvo Connect
2. Functionality Comparison
  - Events
  - Position
  - Reports
  - Driving Profile
  - Zones & Routes
  - Vehicle Status
  - Admin
3. Migration of Data
  - What is migrated from Fleet Management to Volvo Connect and what is not
  - How to export historical data from FM



V O L V O

1.

Where to find key Fleet Management tools in  
Volvo Connect

# Conversion tables

VOLVO BUS FLEET MANAGEMENT	Volvo Connect
<b>Reports</b>	Reports
<b>Events</b>	
<b>Event Reports</b>	
▶ Latest Notifications	Notification Bell
Event Overview	Future development
Event Report	Reports > Map > Position History
Passenger Load	Future development
<b>Subscriptions</b>	
My Subscriptions	Reports
<b>Driving Profile</b>	Map > Position History > Graph View
<b>Position</b>	Map
<b>Vehicle Status</b>	Assets
<b>Administration</b>	Administration
<b>Zone Administration</b>	Map > Zones
<b>Route Administration</b>	Map > Routes
<b>Driver Administration</b>	Administration > Drivers (only for Fleet Admins)
<b>User Administration</b>	Administration > Users (only for User admins)
<b>Vehicle Administration</b>	Administration > Vehicles
<b>Settings</b>	
My Notifications	Notification Bell
My settings	User menu

The screenshot shows the top navigation bar of the Volvo Bus Fleet Management system with tabs for Reports, Events, Driving Profile, Position, Vehicle Status, and Administration. Below the Administration tab, a 'Digital tools' menu is open, listing Map, Assets, Reports, and Administration, each with an external link icon. The user profile at the top right indicates 'Fleet for VBC Migration test' with initials 'LE'.

This screenshot shows the user interface of Volvo Connect. At the top, it displays 'Volvo Bussar Sverige' and the user's initials 'MH'. A 'User menu' is open, showing the user's name 'MADELEN HELLBERG', their company 'Volvo Bussar Sverige', and a 'My Account' link.

2.

# Functionality Comparison

Volvo Connect compared to Fleet Management

If you were previously using this function in FM...	To do this...	... You can instead use this function in Volvo Connect	Comments
<i>Reports</i>			
Reports		Reports	Parameters continuous delivery during 2022
Vehicle Summary	Monitor how your vehicles are being driven	Summary & Performance	
Driver Summary	Identify and rectify bad driving practices	Summary & Performance	
Driver Time	track and manage the working hours of your drivers	Custom	
Utilization	See if you are over- or under-utilizing your buses.	Custom	
RPM	Identify long stretches of idling and high revs	Custom	
Fuel	Monitor fuel and AdBlue consumption	Fuel & AdBlue	
Vehicle & Driver Coaching	Monitor driver behavior	Safety	
Safety	See how safe your bus is being driven	Safety	
Environmental Emissions	View emissions of your fleet	Environmental	
Speed	Analyze the average speed of your bus routes	Custom	
Stop	Analyze number of stops in your bus routes	Custom	
Hybrid Performance	View your hybrid performance	Custom	
<i>Events</i>			
Event Report	View details of any logged event	Map: Position History Reports: Tracking Report	Delivery 2022
Event Overview	View your fleet's patterns and recurring events	Reports: Safety Report	Parameters continuous delivery during 2022
Fault codes	View which fault codes are visible in the cluster	Assets: Vehicle Status	Requires Vehicle Status service
Latest Notifications	Get real-time information about events in your buses	Notification bell	
Passenger Load Report	View approximate number of passengers in your bus		Future development
<i>Driving Profile</i>			
Driving Profile	Track events in a timeline	Map: Position History: Graph View	To be improved during 2022
<i>Position</i>			
Position	Trace your buses' locations	Map	
<i>Other Services</i>			
Vehicle Status	View any fault codes currently active in your vehicles	Assets	
Zones	Create zones that control your buses based on their current position	Map: Zones	
Vehicle Administration: Last import		Assets: Last observation Map: Last timestamp	

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# Events

Volvo Connect compared to Fleet Management

# Events

## New in Volvo Connect

- Live signals from Events in Map start page, e.g. see current fuel level of all vehicles and current driver of all vehicles
- View historical events plotted on the map to see the vehicle's route
- Trips
  - Filter events from Ignition on to Ignition Off to see events within a Trip
  - Get a summary of distance, consumption, driver during the Trip

***Note: Fault codes are not part of Events service, fault codes now require Vehicle Status service and Events service.***

## Not included, added to improvement backlog in Volvo Connect

- Latest Notification subscriptions via e-mail
- Event Report
  - Search via geography
- Event overview
  - Heat map
  - The graphs for: signals, vehicle events, driving events and traffic events
- Passenger Load report
- Add scoped out parameters and events (detailed in following slides)
- Possibility to search by Chassis ID, now it is only possible to search by Vehicle name
- Possibility to view more than one vehicle at a time in Position History

## Not available in Volvo Connect at migration start, continuous delivery during 2022

- Tracking Report (Event Report)
- Driver information



# In which tool can I view which Event data?

## The following events are visible in

Map > Position History **and in** Reports > Tracking Report:

- Ignition on
- Ignition off
- Doors open
- Doors closed
- Driving
- Stopped
- Signal change
- Over revving started
- Over revving ended
- Over speeding started
- Over speeding ended
- Harsh acceleration
- Harsh braking
- Harsh curving
- Excessive idling
- Arriving zone
- Leaving zone
- Zone deviation

## The following events are visible in

Assets > Vehicle Status:

- Warning
- Alarm
- Cleared

*Only for vehicles with Vehicle Status service*

## Not visible in Volvo Connect

- Alco lock
- Request support alert activated
- Request support alert deactivated
- Route Assignment

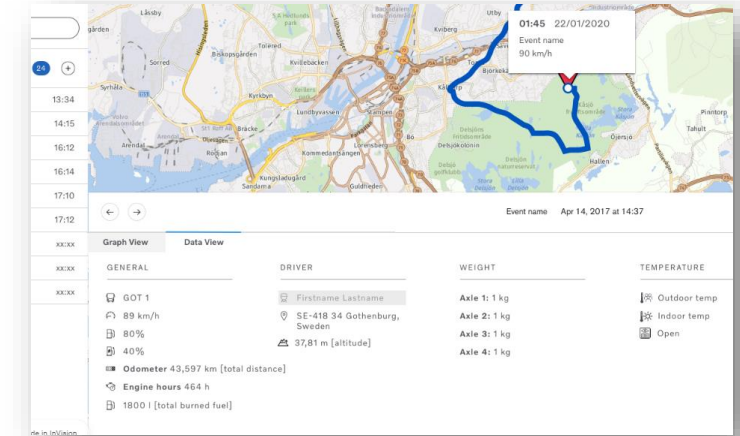
# Map: Position History: Historical events and signals

## Events visible in Position History

- Ignition On
- Ignition Off
- Driving
- Stopped
- Door open
- Door closed
- Signal changed
- Harsh acceleration
- Harsh braking
- Harsh curving
- Overspeeding started
- Overspeeding ended
- Excessive Idling
- Over revving started
- Over revving ended
- Zone Enter
- Zone Leave
- Zone deviation

## Signals visible in Position History

- Vehicle name
- Vehicle Speed
- Fuel Level (diesel vehicle)
- Fuel level CNG (CNG vehicle)
- Fuel level + state of charge (hybrid vehicle)
- State of charge (electrical vehicle)
- Odometer
- Engine hours
- Total consumption of fuel (Diesel, CNG, State of charge (fully electrical), Fuel + State of charge (Hybrid))
- Position Address of the vehicle
- Altitude
- Weight (Axle 1, Axle 2, Axle 3, Axle 4)
- Outdoor temp,
- Indoor temp,
- Door Open/closed
- Engine Coolant Temperature



Picture: Position History tool lets you view historical events

### The following events are not visible in Position History

- Alco lock
- Request Support Alert
- Route Assignment

### The following signals are not visible in Position History

- Battery voltage (only for Vehicle Status)
- Retarder position
- Additional Events signals

### Added to improvement backlog for 2022












- Driver name

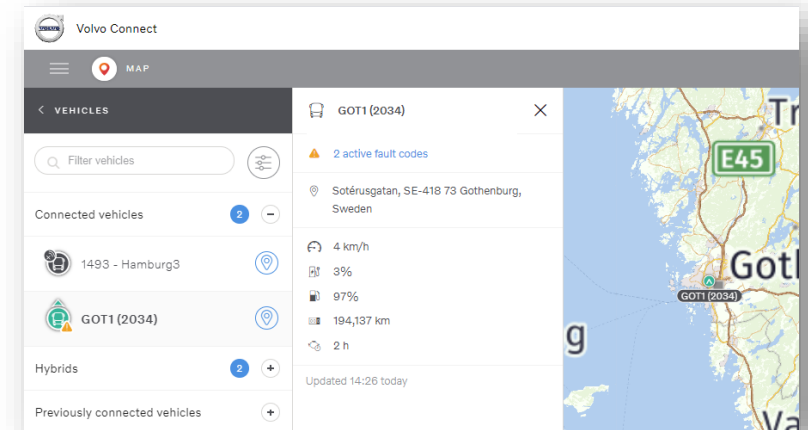
# Map: Live Map: Live signals

If the bus has only Position service the live Map will show latest received Position.

If the bus has Events service, the live Map will show latest values for the following signals

## Live Map Signals

-  Position (lat, long, address)
-  Speed
-  FuelLevel – diesel & hybrid
-  StateOfCharge – electric & hybrid
-  TotalDistance
-  TotalEngineHours
-  Fault codes
-  AnyDoorOpen
-  InsidePassengerTemperature
-  OutsideTemperature
-  EngineCoolantTemp



Picture: Map tool lets you view the latest status of your vehicle.

### Not Visible in Volvo Connect live data

- RetarderPosition
- Altitude
- Axle Weights (1-4)
- TotalFuelUsed
- BatteryVoltage

### Added to improvement backlog for 2022

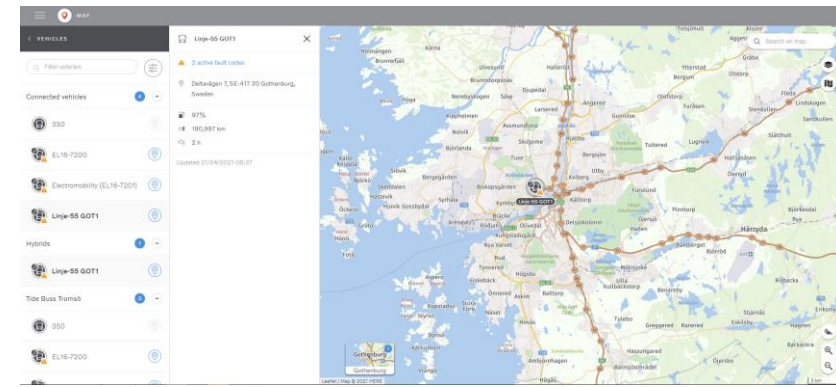
- Driver name

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# Position

Volvo Connect compared to Fleet Management

# Position



## New in Volvo Connect

- Open that map in full screen view to monitor your vehicles on a separate screen
- View Events, Driving Profile and Map together
- Store zoomed in map positions in Map to easily navigate between your locations of interest
- Add your personal Points of Interest on the map, e.g. bus stops or dealer locations.

## Not included, added to improvement backlog for future development in Volvo Connect

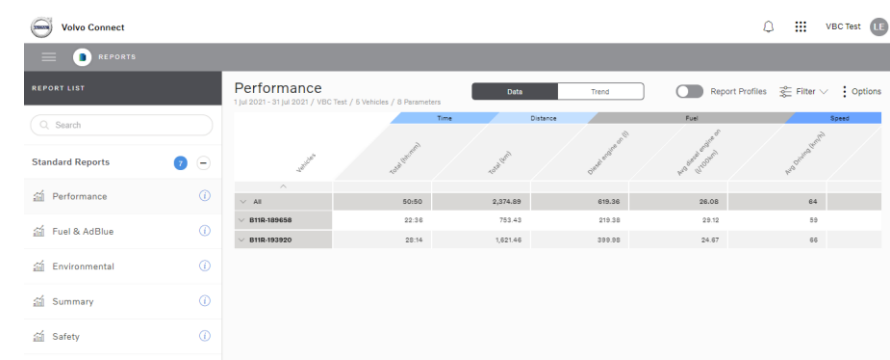
- Altitude not visible in real-time position
- Door Open/Closed not part of Position service (moved to Events service) and not visualized separately with icons on map
- Not possible to request Position from off-board
- Not possible to search by Chassi ID, only Vehicle name

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# Reports

Volvo Connect compared to Fleet Management

# Reports



## New in Volvo Connect

- Easy interface to create custom reports
- Custom reports can be shared with all users
- Electromobility data

## Not included, added to improvement backlog for future development in Volvo Connect

- Road Speed Limiter
- Zone data
- Fuel Report: compare the fuel consumption of your buses with the expected range based on Volvo database.
- Driver Times
- Missing periods report
- Search per hours, now only per day
- Search by Chassi ID, now only Vehicle name

## Parameters not available in Volvo Connect at migration start, continuous delivery during 2022:

### Summary data

- Above economy (hh:mm)
- Above economy (%), (km/h)
- Engine overrev (hh:mm), (%)
- AnyDoorOpen (hh:mm)
- AnyDoorOpen (l), (km)

### Hybrid data

- HybridDriving (hh:mm), (km)
- HybridIdling (hh:mm)
- ElectricalEngineRunTime (hh:mm)

### Counters

- StopsWithDoorOpen (amount), (%), (amount / 100km)
- Stops with door closed (amount), (%), (amount / 100km)
- ESP (amount)
- ABS (amount)
- Avg Overspeeding (amount/100km)

### Histograms

- RPM
- Speed

### Other

- Driver information

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# Driving Profile

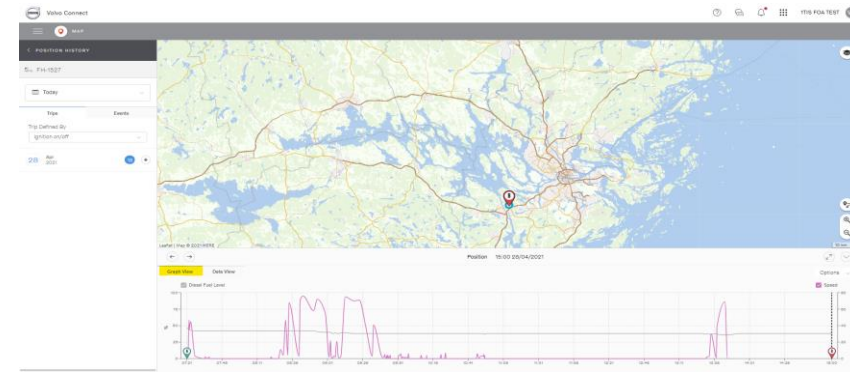
Volvo Connect compared to Fleet Management



# Driving Profile

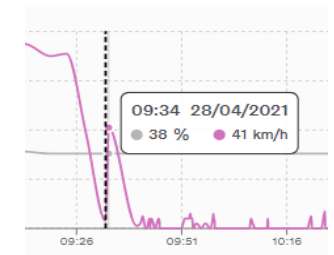
## New in Volvo Connect

- Driving Profile together with map to view where the bus was located at a certain event
- Possible to switch between events and driving profile on a point in time



**Not available in Volvo Connect at migration start, continuous delivery during 2021:**

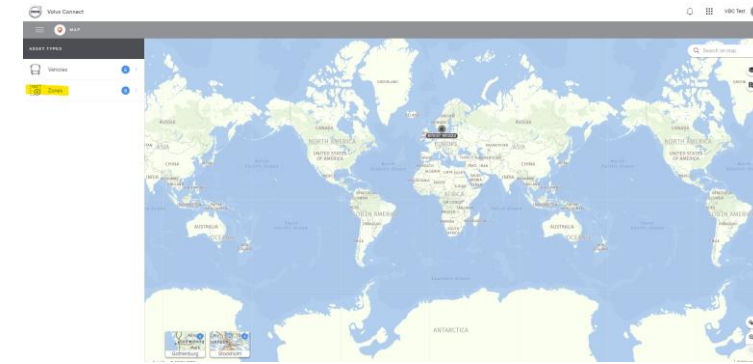
- RPM
- Driving Profile granular data frequency, will be improved
- Driver information



# Other services

Volvo Connect compared to Fleet Management

# Zones & Routes



## New in Volvo Connect Zones

- Possible to create groups for your zones
- Possible to add vehicles to Zero Emission Zones
- Time intervals are always displayed and entered in the zone's geographical time zone (i.e. no need to calculate time differences).

## New in Volvo Connect Routes

- Draw routes directly on map with waypoints
- Use Light Truck or Bicycle route planning options to let the system draw the route for you between destinations

## Not included, added to improvement backlog for future development in Volvo Connect

- Geofences with Enter/Leave based on Position. These zones will be imported as read-only and vehicles need to activate the Coaching Zone-service to be able to see Enter/Leave events.
- Charging Monitoring Zones
- Energy Calculation is not part of Zero Emission Zone Admin
- Coaching Zone and CMZ e-mail notifications
- "Apply to all vehicles" functionality not available, users needs to manually add new vehicles

## Not included, added to improvement backlog for future development in Volvo Connect - Routes

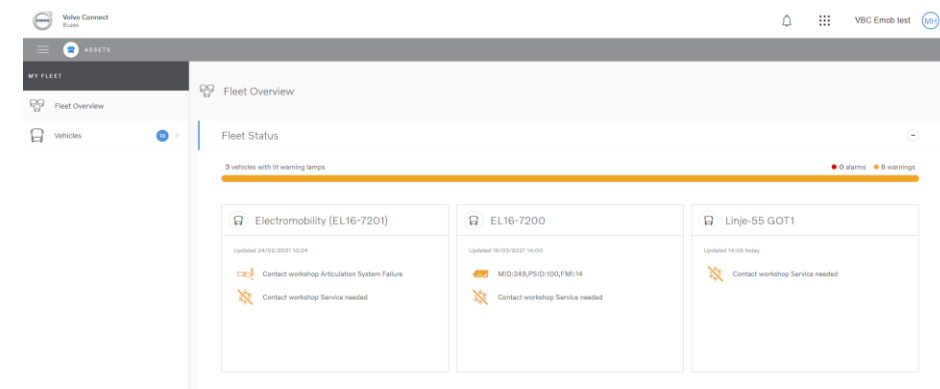
- Route recording app

# Vehicle Status

## New in Volvo Connect

- See historical status of vehicle when alert appeared
- Improved displaying and naming of fault codes

**Note:** Fault codes are no longer part of Event service, customers need to have Vehicle Status service and Events service for fault codes to appear in Volvo Connect



**Not included, added to improvement backlog for future development in Volvo Connect**

- Filtering of specific fault codes to remove them in the application (FM My notifications)

**Not available in Volvo Connect at migration start, continuous delivery during 2021**

- All fault codes displayed in exportable table (part of Tracking Report)

# Admin

## **New in Volvo Connect**

- Possible to restrict user access to specific vehicles or drivers within the same customer
- The FM DriverId has been separated into the two attributes of USB Driver ID and Tacho ID. Neither of them are mandatory. They can exist simultaneously.
- USB DriverId is generated by Volvo Connect system, not by end user (as in FM)
- Phone number and e-mail can be added to a driver (not mandatory)
- Drivers cannot be deleted, only removed.

## **Not included, added to improvement backlog for future development in Volvo Connect - Zones**

- Vehicle Admin: First Observation, IMSI is removed
- User Admin: Measurement Systems reduced to 4 options:
  - Metric (BRA)
  - Metric
  - Metric (PER)
  - Imperial
- Driver Group Work Limits are removed and not possible to add to Driver Groups
- Drivers cannot be added to group at driver creation
- Not possible to export lists of vehicles, drivers or users.

# 3.

## Migration of Data

From Fleet Management to Volvo Connect

# What is migrated from Fleet Management to Volvo Connect and what is not

To make the transition from Fleet Management into Volvo Connect as smooth as possible, some of your data in the Fleet Management platform will be migrated into Volvo Connect.

## Migrated:

- Vehicle Settings

*Any Vehicle settings value that is out of range will be set to default values.*

- Zones and Routes
- Drivers
- Users

## Not migrated:

- Vehicle Groups
- Driver Groups
- Vehicle names and descriptions
- Any stored custom reports
- Any report subscriptions – please end your subscriptions in FM and setup new subscriptions in Volvo Connect.
- Historical data reported for the vehicle (see next slide)

## How to export historical data from FM

You can export historical data to Excel files and store it outside FM.

[Here](#) you can view the guide if you have not done this before!