

# Consat Telematics Solution

Fleet Studio Reference Manual

Covers release 25.7.(X)

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# 1 Introduction

The reference manual you are holding in your hands (or reading on your screen) covers the Consat Telematics Solution Fleet Studio web application.

Fleet Studio is a flexible web app that includes functions/tools for presenting information and interacting with the CTS system in various ways. Not least, it provides mobile-friendly access to selected functionality in the system. Unlike our fully featured pc application, Traffic Studio, Fleet Studio is designed for standardized touch navigation and follows Google's "Material Design" rules for a familiar workflow, look and feel.

Note: The application is designed to scale and be useable with touch navigation on a small screen tablet or even a phone, but this feature is not officially supported/guaranteed, as of now.

## 1.1 Browser/Touch Support

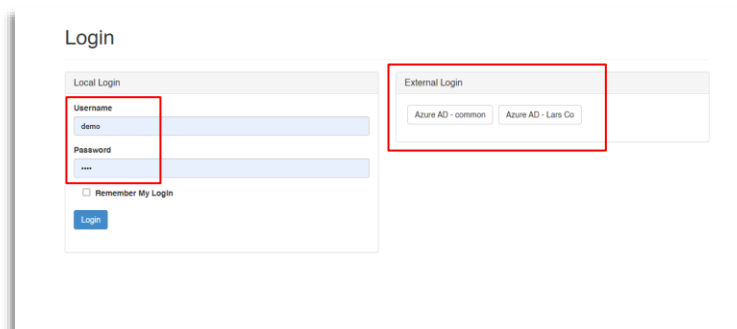
Officially supported on **Google Chrome** desktop browser, but should work well on Android/iOS too (see comment above).

The following manual describes use in a desktop browser with mouse navigation. When we write "click" you can read "touch" if you use a touchscreen device.

## 1.2 Log-In

There are **different ways of accessing/logging in to the application** (Local with user, password /Customer AD/Through Portal ...).

Your administrator will provide you with specific log-in information.



The screenshot displays the 'Login' interface of the Fleet Studio application. It is divided into two main sections: 'Local Login' and 'External Login'. The 'Local Login' section on the left contains a 'Username' field with the text 'demo', a 'Password' field with masked characters, a 'Remember My Login' checkbox, and a 'Login' button. The 'External Login' section on the right features two buttons: 'Azure AD - common' and 'Azure AD - Lars Co'. Red rectangular boxes highlight the 'Username' and 'Password' fields in the Local Login section, and the 'External Login' section as a whole.

## 2 Basic Application Functionality

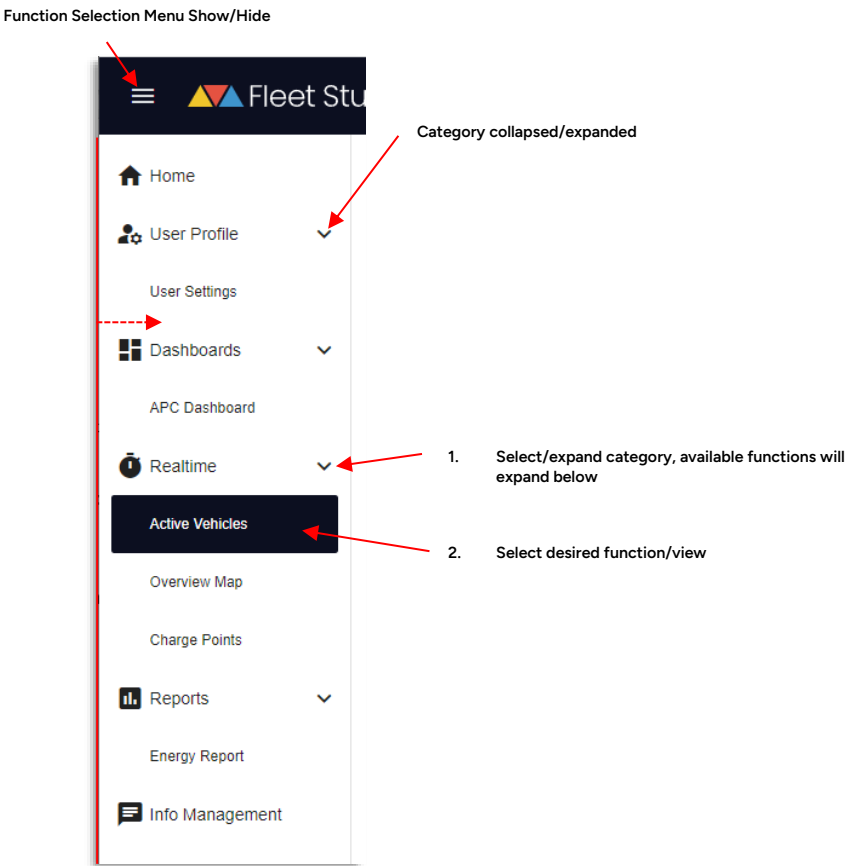
### 2.1 The Top Application Bar



### 2.2 The Function Selection Menu

If your configuration does not by default open a specific view/function, you will have to select it manually.

- **Click on the menu symbol to expand the menu.** Here, all the (customer-specific) function categories and individual functions in your application will be listed.
- Click on a category (Dashboards/Realtime/Reports...) to select it/expand available sub-functions/views.
- Click to select sub-function. The main view will load the selected function.

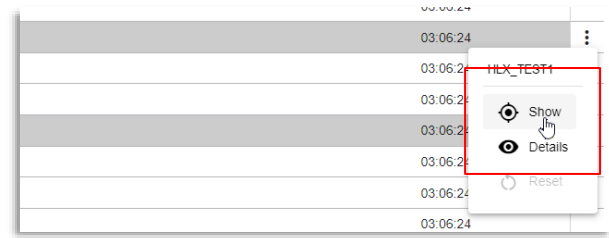


- **Note:** On a larger display, after 15 seconds of inactivity, the menu will close.

## 2.3 Navigating

### Row Menu: Details/From one view to another

In all views, the “three dots” menu symbol is a button that opens a menu for that particular item or row. It can, for example, open a menu for **functions related to the vehicle whose data is presented on the row** – like “switch to map view and show this vehicle” or “open/expand the details section and show details for this vehicle”, see below.



Fault Status	System Address	Name	Line	Destination	Block	Journey	Journey Status	Passengers Onboard	State of Charge (%)	Journey Progress (%)	Block Progress (%)	Place
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	0 - 100	0 - 100	0 - 100	Filter
OK	2148101007	2148101007										
OK	2148101010	2148101010										
OK	2148101011	2148101011										
OK	2148101017	2148101017										
OK	2148101301	2148101-301	7	Tynnered	1128_VT	9015014500700082	Started		97		26	
OK	2148101302	2148101-302	5	Länsmansgården	1096_VT	9015014500500068	Started		100		33	
OK	2148101305	2148101-305	5	Länsmansgården	1103_VT	9015014500500078	Started		3		26	
OK	2148101307	2148101-307	11	Bergsjön	1160_VT	9015014501100103	Started		2		34	
OK	2148101308	2148101-308	7	Bergsjön	1141_VT	9015014500700083	Started		71		34	
OK	2148101309	2148101-309										
OK	2148101310	2148101-310	5	Ostra Sjukhuset	1088_VT	9015014500500069	Started		73		26	
OK	2148101311	2148101-311	1	Ostra Sjukhuset	1012_VT	9015014500100077	Started		69		26	
OK	2148101312	2148101-312	11	Bergsjön	1153_VT	9015014501100088	Started		84		26	

### Item/Row Selection

Click on a row or an item to select it. If it can be selected it will be highlighted (in light blue).

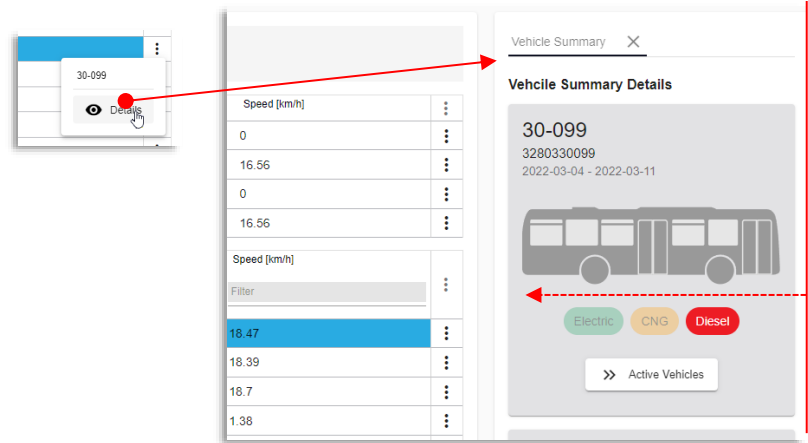
For instance, in the Active Vehicles view, with the details section expanded, the currently selected row/vehicle is the one whose details are presented in the details section.

OK	2148101302	2148101-302	5	Länsmansgården	1096_VT	9015014500500068	Started		100		33	
OK	2148101305	2148101-305	5	Länsmansgården	1103_VT	9015014500500078	Started		3		26	
OK	2148101307	2148101-307	11	Bergsjön	1160_VT	9015014501100103	Between		2		34	
OK	2148101308	2148101-308	7	Bergsjön	1141_VT	9015014500700083	Started		67		34	

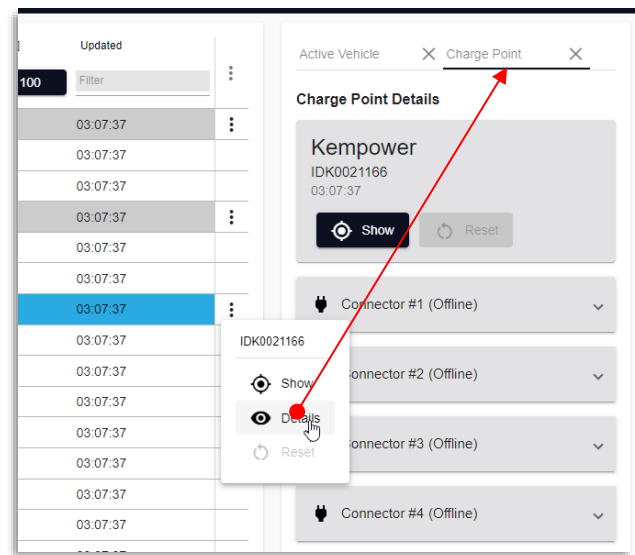
Detail Views

Many views/reports include detailed views, showing a selected item more in detail, often including added interactive functionality. Details can be accessed through the row menu (see description above).

- When a details view is opened through a specific view, the **details section** (to the right on a larger display) **expands, showing a corresponding details tab**.
- If you select another row in the same view, that tab will show those details.



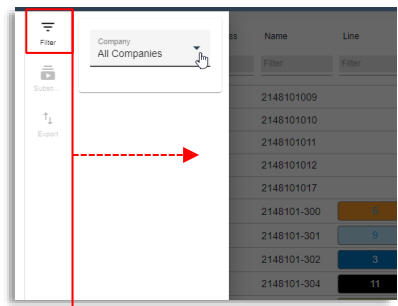
- Switch to another view, open a details view from that view and a new corresponding tab will be added in the expanded details section.



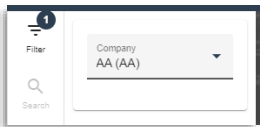
- The details view(s) will stay in place as you open other views/reports, making comparisons, etc. easy.

## 2.4 Filtering

Filters affecting the whole view are located to the side of the view (under the view on small format devices in portrait position). Here you will presently find the Company filter in several views. In the filter menu, you can choose between data/vehicles from all companies or a specific company.



"Global" Company filter affecting the whole view: Select all or one specific company.



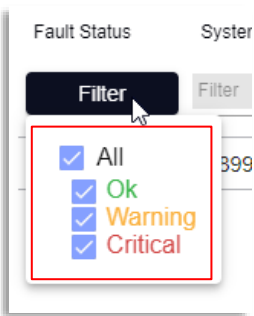
The current filter function is indicated with a symbol, also visible with the section collapsed, see example.

There are several specific filters available in most data/information presenting views. Many columns include free text filters or range filters and status presentations often include checkbox status filters. These allow you to exclude all unwanted information and clean up the presentation.

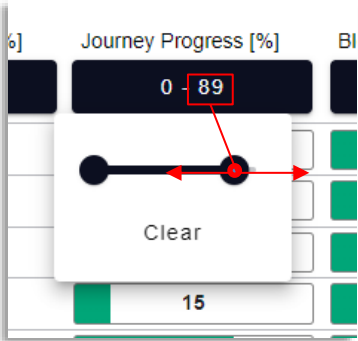
Free text filter: Exclude all non-matching items. (Matches highlighted w. bold font.)

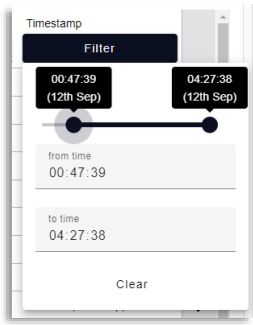


Checkbox filter: Include/exclude states, zone types, etc.



Range Filter: Only show items with data that is within the set range. Drag the min and max controls to set the range. Current range is indicated in the filter button.

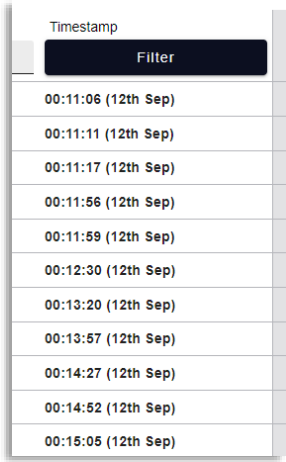




Time range Filter: Only show items with data that is within the set time period. Drag the min and max controls to set the range.

Columns with applied filters

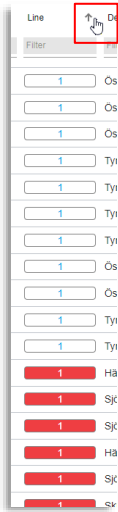
When a [column]filter has been applied, the data in that column is displayed bold. This makes it easy to see which columns are currently filtered and limiting the amount of items/data displayed:



2.5 Sorting

Lists can be sorted in selected order by clicking on/touching the table header. Click again to reverse the order.

A sorting indicator (arrow) shows the currently selected sorting order.

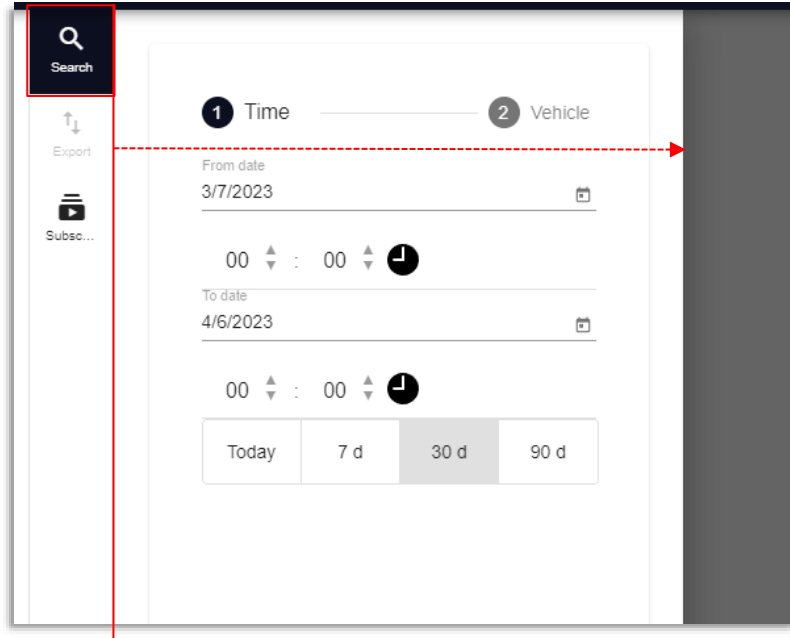




## 2.6 Reports: Selection, Search

Open the report search section by clicking on the Search symbol in the vertical menu, see below.

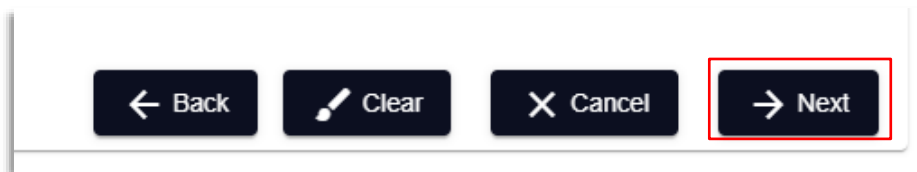
(Note: When you first select a report, the search section will expand, prompting you to perform a search to get the report.)



### Search Workflow: A One, Two or Several-Step Process

- In some reports, the search selection is divided into two or more separate steps to allow more room for lists, etc.

Make selections in the first step and click on the Next button to move to the next step. (And, in step two click on the "Back" button if you want to go back to step one to make changes.)



### Clear Selection or Cancel the Search

The buttons in the bottom part of the search section include two "I changed my mind" buttons: Click Clear to remove any selections in the current section/step, or click on Cancel to cancel the search and close the section.



Assets

- Items or “assets”, included in a report can be vehicles, vehicle groups, drivers or driver groups.
- Only one asset type can be included in a particular search.
- **Note:** In the current release, vehicle groups are managed outside Fleet Studio. (Create/edit groups with the Traffic Studio Vehicle Groups tool). You can view vehicle groups and their included vehicles in the Vehicle Group Admin view, though, see Chapter 12.4

Select the type of “asset” you want to include in your search in the simple menu:

Time

2

Assets

Event Types

Drivers

Vehicles

Driver Groups

Vehicle Groups

Select/De-select Items, Search Period

Click on an item in the Available list to move it to the Selected list. (Thereby selecting it for the search.) Or click on the “move all”-symbol to move all items to the selected list.

To de-select items, you click on those items in the selected list, thereby moving it back to the available menu. The move all symbol de-selects all selected items by moving them back to the available list.

**Asset/item selection**

The select/deselect all buttons moves all items to/from the selected list.

Item Selection/ de-selection: Click on an item in a list to move it to the other list.

**Time selection**

**Define Searched Period:**

Open calendar for simple date selection (From and to dates.)...

Open the “Clock” menu for time selection

Or: Select a predefined period: Today/Last 7days/last/30 days or last 90 days.

**Time Selection: Clock Menu**

The clock menu is very intuitive:

1. Click and drag the “hour” selection in the circular clock menu (00 to 24h in two concentric circular menus).
2. Then select minutes in the following circular clock menu.
3. Click OK to save or Cancel to cancel.

Inactive Vehicles/Drivers

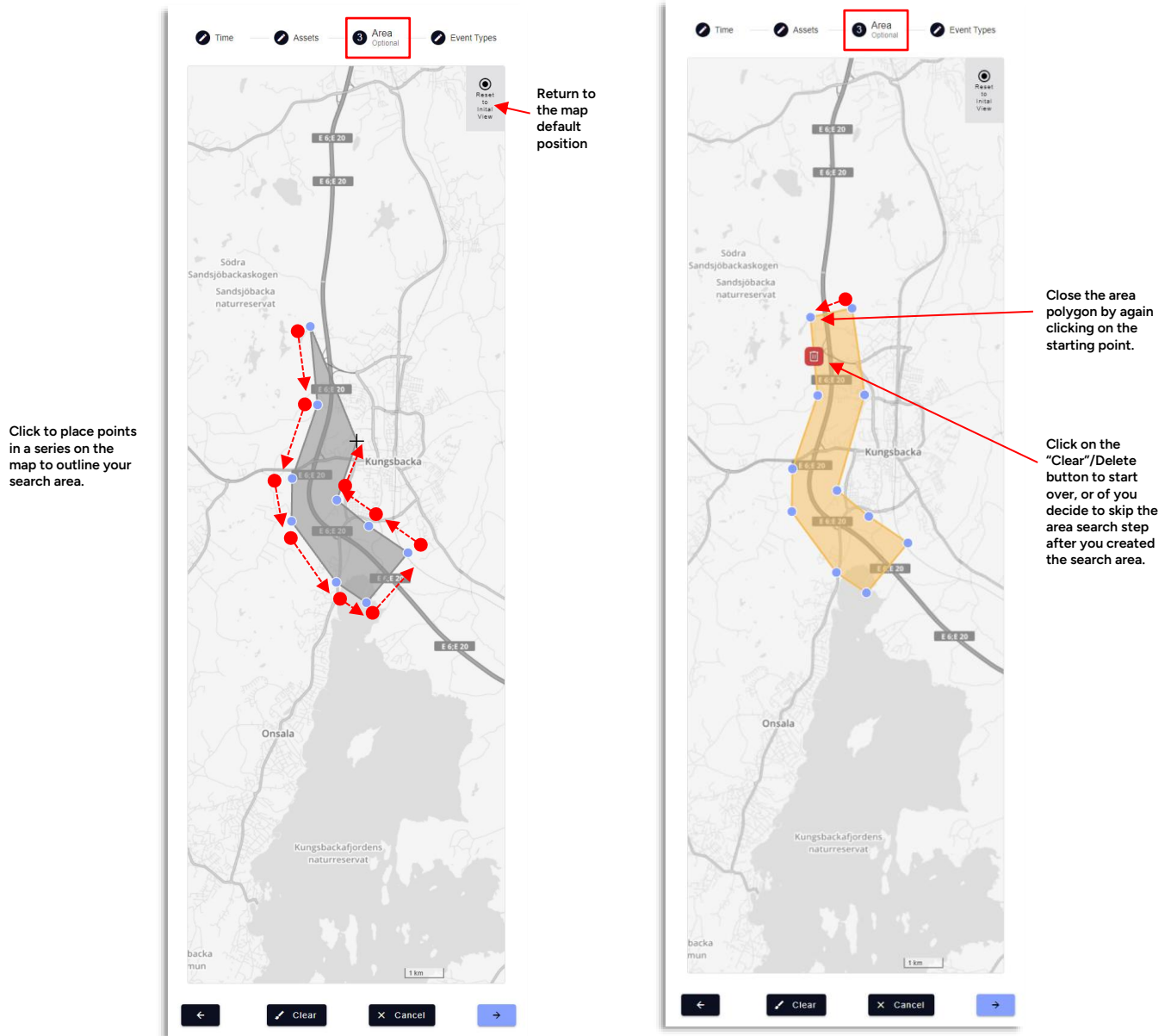
Check the Inactive box in the search section to include inactive vehicles/drivers (in the available items list). These inactive items are listed with greyed out text/numbers.

☒ Inactive vehicles

## Area (Optional)

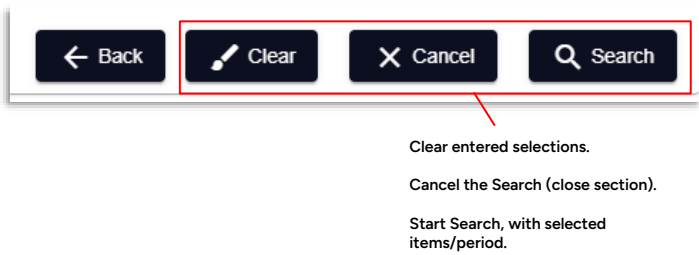
**Note:** This selection step is currently **only** available in the **Vehicle Events Report**.

- **Area Search** will only include items geotagged inside an area (polygon) that you define on a map in the search section.
- Click to place points in sequence to outline the search area and close the area by again clicking on the starting point, see below.
- You can clear/delete a created area by clicking on the red delete button displayed when the area has been closed, see below.



### Start the Search

When you have selected the period, the assets and – if applicable, Event types, etc. Its time to start the search. Click on the “Search” button in the bottom section.

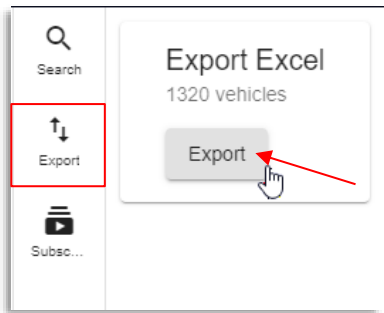


## 2.7 Reports: Export Report Content

You can choose to export the contents of a report by simply selecting “Export” in the vertical menu (bottom horizontal menu on small screen touch displays).

- **Note:** Currently, Excel is the only available export format.

Click on the export button in the Search/Export/Subscribe menu section. Depending on your browser the exported file will be available in your browser window or configured “save” location.



## 2.8 Reports: Report Subscription

You can choose to subscribe to reports, i.e get periodical reports mailed to you (and, optionally, other recipients of your choice).

- The subscription will include data from currently selected vehicles/groups/all vehicles...
- The reporting period of a subscription starts where the last subscription report period ended and it ends depending on the set interval.
- The subscription mail(s) will include the report in excel format.
- **Note:** You can view all your current subscriptions on the User Subscriptions page, see chapter 10.3
- **Note:** When you select "**All vehicles**", the delivered report will include all vehicles, even vehicles that have been added after the subscription was started. (Which differs from selecting all vehicles in the search menu and basing the subscription on that, then only those specific vehicles will be included.)

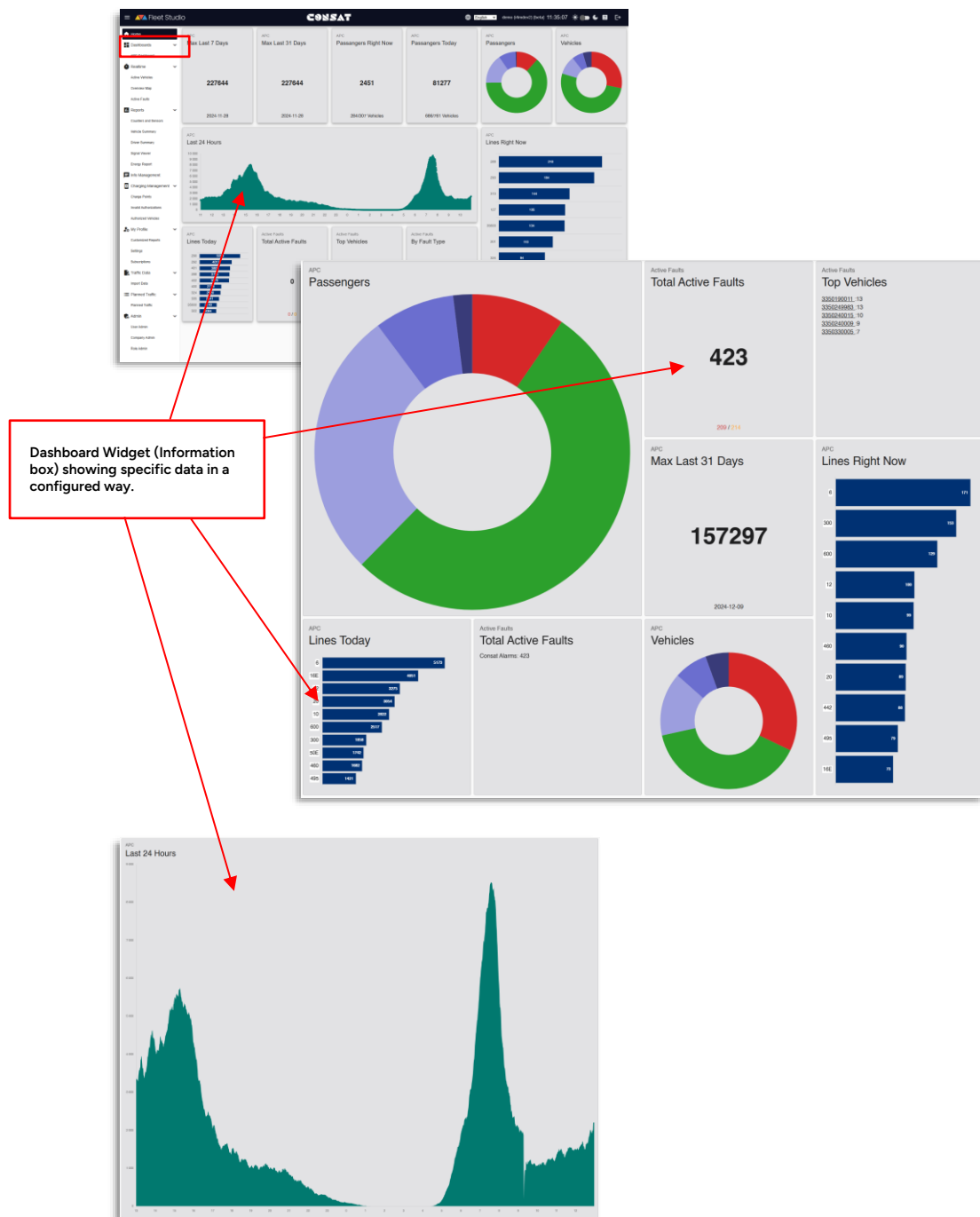
Open/Close  
Subscription  
Section

The screenshot shows a mobile application interface for creating a report subscription. The form is titled "Selected" and shows "1339 vehicles". It includes fields for "Name \*" and "Email \*" with a "+" icon for adding multiple recipients. There are radio buttons for "Current selection" (selected) and "All vehicles". Below these are buttons for "Daily", "Weekly", and "Monthly" intervals. A "Save" button is at the bottom right, and a "My Subscriptions" button is at the bottom center. Red arrows point from text annotations to various elements in the form.

Annotations:

- Enter a suitable subscription name
- Enter your email address.
- Add email address (multiple recipients)..
- Enter subscription interval.
- Let the report either cover all vehicles, or use the vehicle selection in the search section (you need to first perform a report search to use this alternative).
- Click to save (start) your subscription.
- Go to the My Subscriptions view, to view all your currently active subscriptions

**Note:** The dashboard functionality is under development. It is currently available as a standard default configuration with APC data and active faults. In upcoming releases, you will be able to configure the presentation and add more information.



## 4 Dashboards

Dashboards are great for a quick overview of selected statuses and real-time data, like “health metering”, system performance, or Passenger load. Currently, we offer an APC dashboard for users with Consat APC functionality in their systems.

**Note:** A flexible dashboard function with user-configured “widgets” (information sections building the dashboard) will be available in upcoming releases. See the examples in the previous Home view chapter.



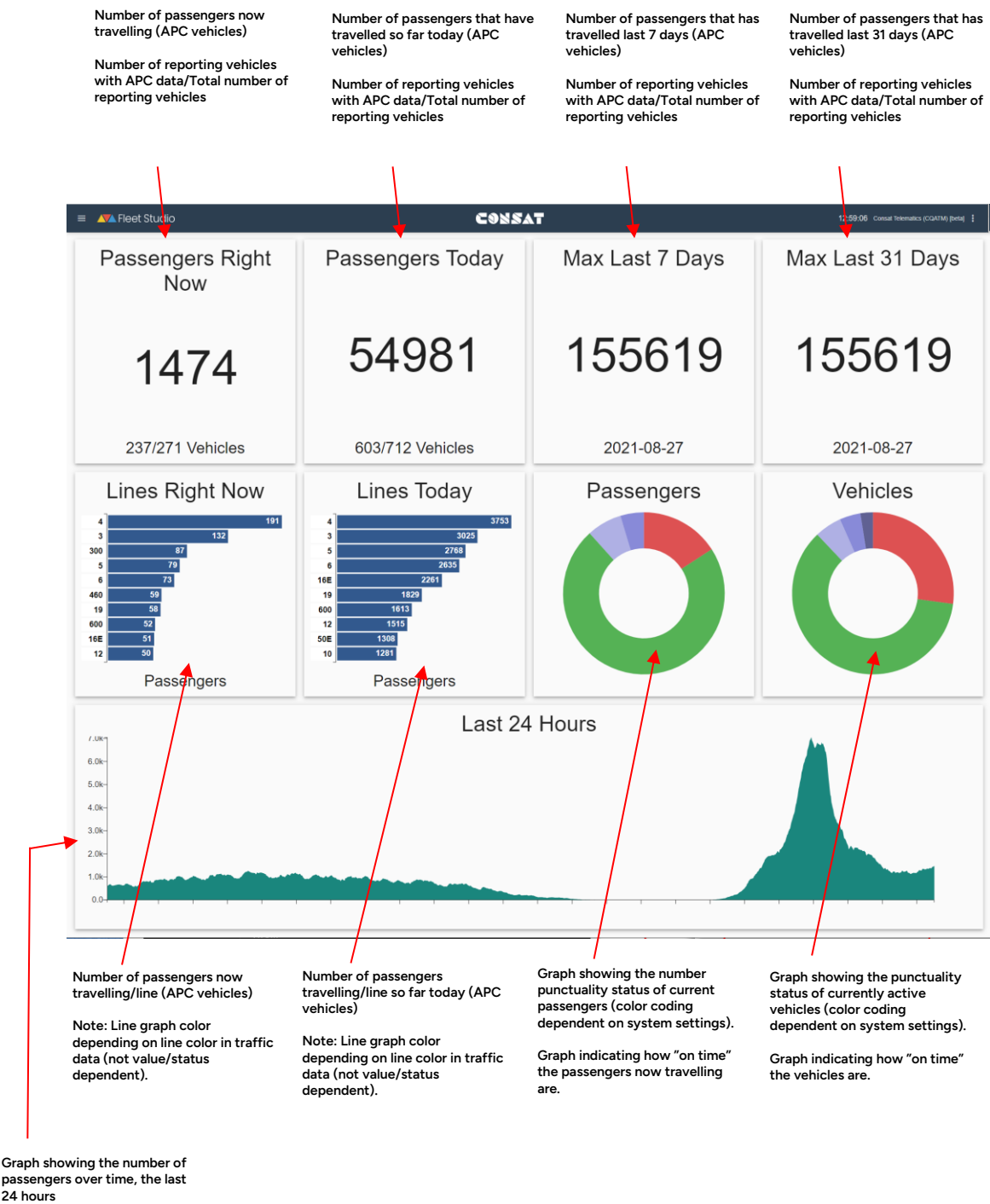
# 4.1 APC Dashboard

- Customer/user-dependent function/content

If your configuration does not provide direct access to this view, open the function selection menu **Dashboard** section and click on **APC Dashboard**.

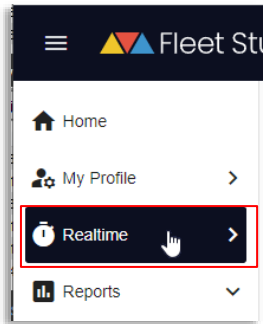
## Overview/Main View

The view is not interactive and very simple, see the description below.



# 5      Realtime

This category includes all real-time monitoring tools, covering basic Traffic Monitoring or Vehicle Monitoring needs. These tools are updated “live” as data from external equipment and vehicle reports are received from the vehicles in the system.



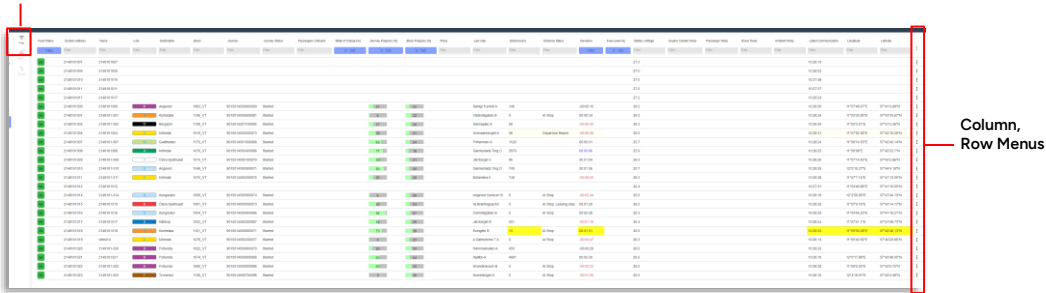
Use them for checking the status and location of the vehicles in your fleet. Verify your electric vehicle's state of charge, monitor vehicle chargers, and access detailed, up-to-date, information about specific vehicles.

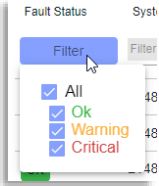
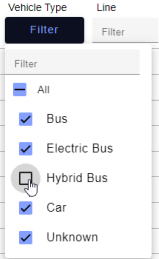
# 5.1 Active Vehicles

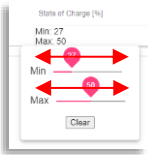
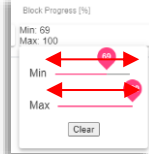
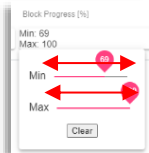
The Active Vehicles view shows selected contents of the vehicle reports, updated in real-time. It provides a handy overview, or powerful data/state-specific monitoring, depending on how you filter the data.

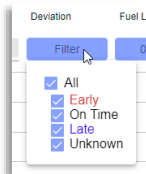
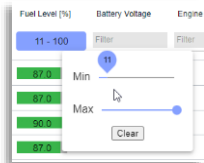
For instance, by only including (electric) vehicles with a specific SoC range, within a specific journey progress range, you can quickly highlight working vehicles that may have dangerously low battery levels...

Filter Section: Company/Operator, Last Report Age, Excluded faults



Name	Description
Fault status	<div>If a vehicle has active faults or not. (Ok = no faults) Includes fault state filter: </div>
System Address	Vehicle system address
Assignment status	If the vehicle has an assignment (and what assignment).
Name	Vehicle name /no.
Line	The line the vehicle is reporting it is servicing.
Vehicle Type	<div>The type of vehicle: Bus/Electric Bus/Tram/Ferry... Filter: Check the boxes of the vehicle types you want to include (The filter is dynamic, it only includes the vehicle types in your fleet). </div>

Name	Description
Destination	Vehicle's journey destination.
Block	Assigned/Serviced Block
Journey	Serviced Journey's number.
Journey Status	Status for each journey: started, between, in a queue, off route, ended, aborted. "Learning" is displayed for training vehicles. Replacement vehicles add "Replacement".
Passengers Onboard	The current number of passengers aboard, according to the APC system.
State of Charge	<p>Electric vehicles: The current battery charge level (per cent).</p> <p><b>Note:</b> Set the threshold filter to only view vehicles with SoC within set limits. (The Clear button resets the filter.)</p> 
Journey Progress [%]	<p>How far along the assigned journey the vehicle now is. (100% = journey completed.)</p> <p><b>Note:</b> Set the threshold filter to only view vehicles with journey progress within set limits. (The Clear button resets the filter.)</p> 
Block Progress [%]	<p>How far along the assigned block the vehicle now is. (100% = block completed.)</p> <p><b>Note:</b> Set the threshold filter to only view vehicles with block progress within set limits. (The Clear button resets the filter.)</p> 
Place	The geographical location of the vehicle (if available).
Last Stop	The last serviced/passed stop point
Distance	Distance from the last stop point

Name	Description
Deviation	<p>Deviation from the timetable.</p> <p>Includes a filter for deviation status (configured in settings, see the previous chapter).</p> 
Fuel Level	<p>Current fuel (diesel) level.</p> <p>The filter allows you to only view vehicles with reported fuel levels within the set range.</p> 
Battery Voltage	Vehicle battery voltage (combustion engine)
Engine Coolant Temp[erature]	Vehicle [combustion] engine coolant temperature
Passenger Temp	Passenger compartment temperature, according to vehicle sensor
Driver Temp	Driver compartment temperature, according to vehicle sensor
Ambient Temp	Outside temperature, according to vehicle sensor
Latest Communication	The time stamp showing when the vehicle last communicated with the central system
Longitude	Last reported position: Longitude
Latitude	Last reported position: Latitude

## Filter Section: Companies, Communication, Vehicle Types, Excluded Faults.

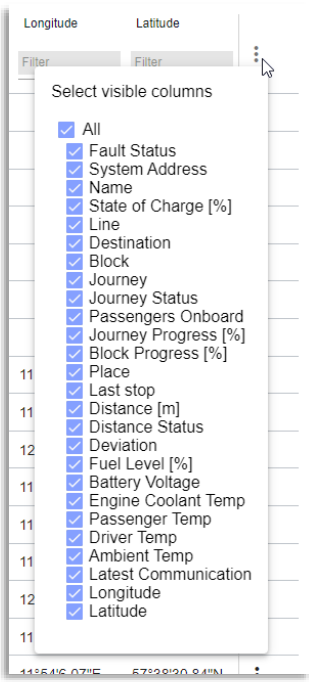
The filter section allows you to “focus” your list on only the vehicles/the information needed.

- You can include only vehicles from selected companies.
- You can choose to only view vehicles that have communicated with the CTS central system within a set period, to exclude vehicles that are not currently active.

**Note:** If you do not check the “Filter Max Age” box, all vehicles that have communicated at least once will be included in the presentation, even vehicles that have been inactive for a very long time...

- You can include only selected vehicle types.
- An you can choose to include presentation of faults that have been individually excluded (most often because they clutter the presentation, or are not deemed important for your user group.).

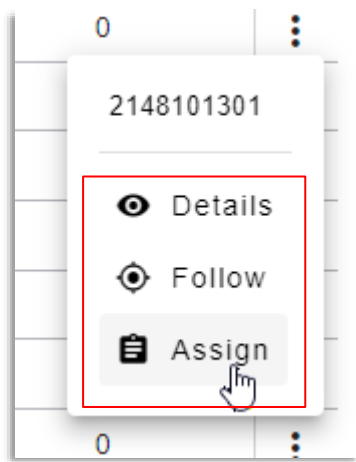




## Row Menu

Click on a row menu to access **functionality related to the particular vehicle**. You can choose to expand the details section or switch to the Overview Map and follow the vehicle, see the following sections.

Depending on your system, you may also have access to the **Assign** function, described in a following sub-chapter.





[Vehicle] Details

When you select Details in the row menu, the Details section to the right will expand showing an Active Vehicles tab, see below. This section is a “dashboard” divided into sections that will always provide the latest **available** information about the vehicle.

- Vehicle door status and any warnings are displayed in the top section, see examples below.
- The section map control allows you to follow/un-follow the vehicle on the map.
- Click the Events Today button to view all events logged by the vehicle the current day - in the Vehicle events view.
- The Signals section allows quick access to viewing a selected signal over time (the current day) through the signals menu. See chapter: 6.6
- Note: Specific vehicle faults can be excluded from this presentation, see the Settings chapter. This exclusion can be overridden, see the Filter section description in this chapter.

Active Vehicle

Active Vehicle Details

2148101301

2148101301

11:57:42

GPS Pos

Follow

Amb. Temp

Speed

3.4 km/h

GSM Signal

100.0

Battery

26.3 v

Driver

Not logged on

Fuel

SOC

Driver Temp

Pass. Temp

Block: 7396590

Line: 7

Destination: Tynnered

Deviation

00:02:41

APC Onboard

Events Today

Active Faults (1)

Previous Faults (17)

Signals (13)

Vehicle Name, Door Status

Positioning/map Functionality: Follow Vehicle on/off

Vehicle Data, Logged In Driver

Assinmnet section shows current assignment (if any)

TM information: Assignment, Deviation, APC (Passengers Onboard)

Show events logged today (in the Vehicle Events view).

Active and Previous Faults, Signals (vehicle dependent)

Expand section to view details.

Warnings (flashing)

Fire Alarm

[Driver] Panic Alarm

Assignment

No Assignment

Active Faults (2)

21:52:48 (3rd Apr)  
System detected 7 unexpected reboots in 604800 seconds  
Check power source to MX4. (Excessive unexpected reboots)

10:12:49  
Brake System, Low pressure supply, Value too low  
MID:136, PSID:30, FMI:1

Previous Faults (49)

Signals (13)

Signal	Value
Axle 1 Weight (2031)	5422
Axle 2 Weight (2032)	7839
Axle 3 Weight (2033)	13127
Axle 4 Weight (2034)	6397
Battery voltage	28 V
Engine Coolant Tem...	78
Fuel Consumption (...)	200.47
Fuel Level (411)	83
Inside Passenger T...	68.0
Outside Temperatur...	17.8
Total Distance (409)	319,762,060
Total Engine Hours...	18,506
Total Fuel Used (4...	232,068

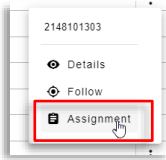
Menu: View signal over time (today) in Signal Viewer view.

## Assign [Vehicle]

Select Assign in the row menu of an active vehicle to open the Assignment menu/view (or access the function through the button in the details section).

Here, you can assign the selected vehicle to a block (in the traffic data imported into your TM system).

- Assigning a vehicle in the current version of FS works just like performing a manual assignment in the vehicle. You can perform a manual assignment or reinforce an assigned vehicle.



- Fill in the menus from top to bottom:

A screenshot of the 'Assignment - 2148101301' form. The form has several fields: 'Service type\*' (Normal), 'Date\*' (4/3/2024), 'Block\*', 'Journey', 'Start Stop', and 'Last Stop'. There are 'Cancel' and 'Assign Vehicle' buttons at the bottom. Red arrows point to each field with corresponding instructions. A small inset shows the 'Service type' dropdown menu with 'Normal' and 'Reinforcement' options.

Service type: Normal [assignment] or reinforce currently assigned vehicle.

Select date (for traffic data selection) – current date selected by default.

Select block.

Select journey in above selected block.

If you do not want to start your assignment at the first stop point in the selected journey, you can select a start stop point.

If you are reinforcing a specific journey section, you can also select the last stop of the assignment.

When all the menu selections are completed, the Assign vehicle button will become active. Click it to immediately assign the vehicle.

## End Assignment

To view and/or end a current assignment, open the assignment menu and select “End Assignment” in the the assignment view. See below.

A screenshot of the 'Assignment - 2148101300' form. The form has several fields: 'Service type\*' (Normal), 'Date\*' (4/10/2024), 'Block\*' (1), 'Journey' (842: 09:35 - 10:25 | 842: Torp, Lysekil | 8 | Lysekil), 'First Stop' (09:35 - Torp Terminalen), and 'Last Stop' (10:25 - Lysekil Havets hus). There are 'Cancel' and 'End Assignment' buttons at the bottom. A red arrow points to the 'End Assignment' button with an annotation.

With an active assignment, the view menus are greyed out (read only) and the “End Assignment” button displayed.

## 5.2 Overview Map

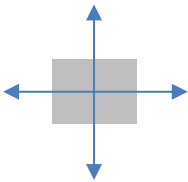
Use the very flexible map presentation to locate all (or s specific) vehicles. The map can be zoomed, tilted and rotated for 3D presentation – a handy way of focusing on a specific area.

- Use the filter section for excluding vehicles, not of interest. (Currently, a Company filter is the only filter available.)
- You can open/access the map view to view vehicles, chargers, etc. from other views through item menus.
- The map position is retained from the last session. Reset to the default position (defined in Settings) with the “Return to initial view” in the Map controls pane.

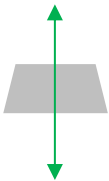


### Mouse Map Controls


Click and drag to pan (move) map.




Right-click and drag vertically to tilt map (change pitch)




Items/Vehicles on Map



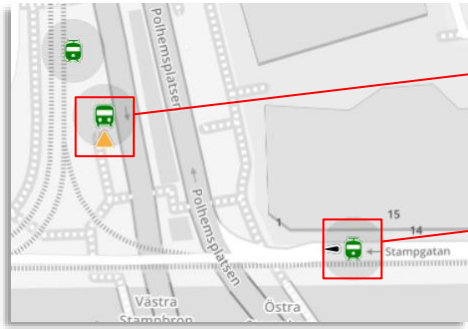
Ferry  
Arrow shows GPS heading



Battery symbol shows  
approx. SoC




Active fault (red=critical)




Bus with active fault  
(orange= non critical/minor)

Tram



Warning symbols: Driver Alarm [left],  
Fire Alarm [Right], also in Active Vehicle  
Details

Map Controls



Zoom In  
Zoom Out

Pan Left  
Pan Right  
Pan Up  
Pan Down

Rotate Right  
Rotate Left  
Increase pitch  
Decrease pitch  
Reset warning and pitch

Reset to initial view

Show layers

Animate vehicle movements on/off

Zoom map in/out

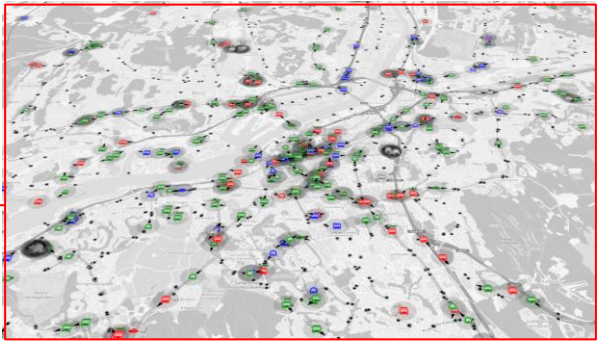
Pan map left/right/up/down

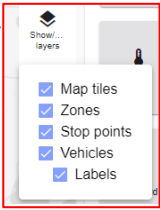
Rotate and pitch map

Return to initial view, map settings

Menu: Show/hide layers

Animate vehicle movements on/off





Show... layers

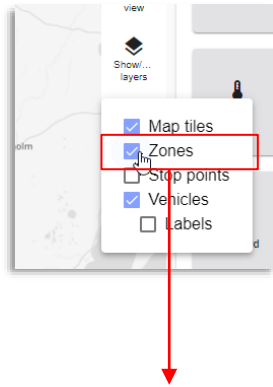
- ☒ Map tiles
- ☒ Zones
- ☒ Stop points
- ☒ Vehicles
- ☒ Labels

## Details view

See the description in the previous chapter.

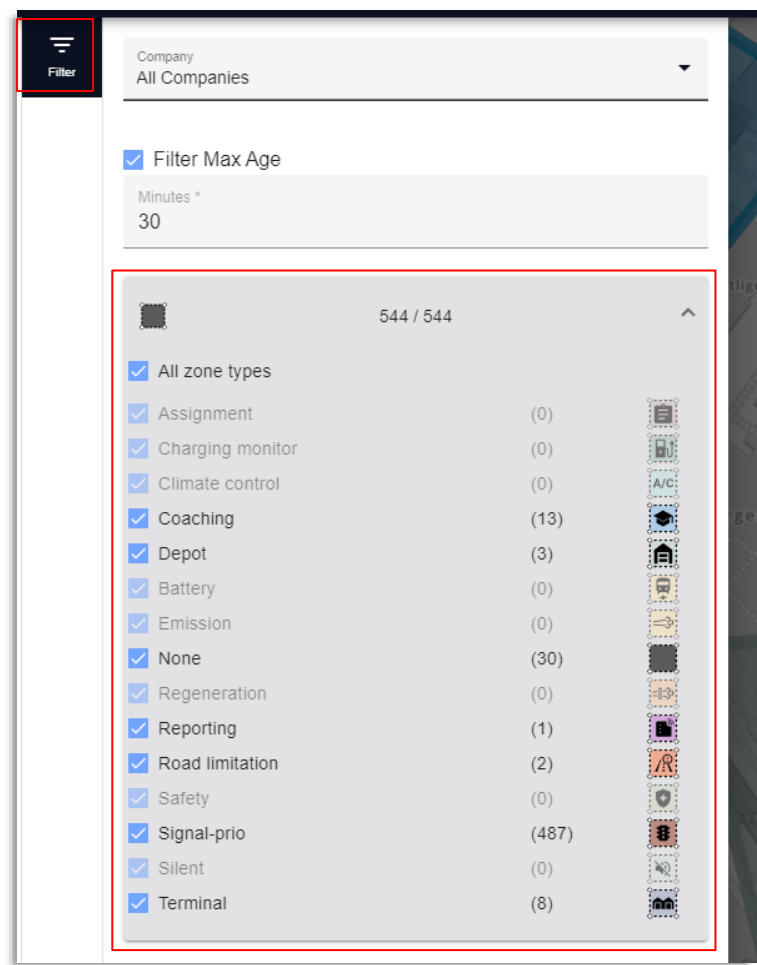
## Zones (zone layer visible)

When you select zones in the Show/hide layers menu (see above) **a zone type filter is added to the filter section.**



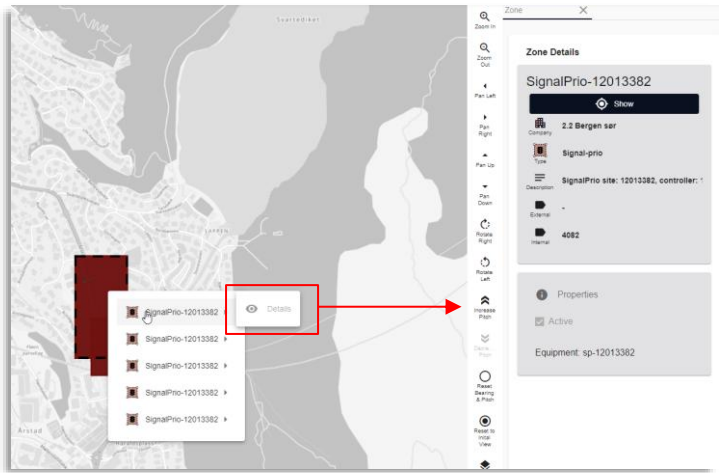
The zone type filter allows you to selectively view only the zone types you want to see on the map. Check/un-check boxes to view/hide types. Zones not present are greyed out.

**The zone types are symbol and colour-coded: See the filter menu below for type symbols.**



Zone Details

Click on a zone on the map to open the zone menu. Currently, the only menu alternative is the Zone Details view. Click on this to open the details view for the zone. The zone details/properties differ depending on the type.



## 5.3 Active Faults

This realtime view complementing the Active Vehicles view, lists all currently active vehicle faults or only vehicle faults activated the last configured time period (see below).

Two types of faults/categories are listed and can be filtered:

- Consat Alarms (Consat defined faults triggered by the vehicle computer)
- Faults Reported by Vehicle (Vehicle fault category listed and separated in filter)
- Use filters and free text column filters to find vehicles/faults...
- **Tip:** Select a row/fault and then switch to the Active Vehicles view, using the main menu. The vehicle with the fault will be pre-selected.
- **Note:** Specific fault types can be excluded from the presentation, to de-clutter it, see the Settings chapter.
- **Note:** You can also exclude specific faults from the presentation using the row menu in this view. See the “Exclude faults section below”.

Active Faults

Alarm	Time	Vehicle	Fault	Type	Description	Technical
Filter	Filter	Filter	Filter	Filter	Filter	Filter
Warning	08:51:53	338010318	Lamp status 0H4TE	Consat Alarms	power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:59:34	338010304	Lamp status YELLOW	Consat Alarms	power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:59:35	338010304	Lamp status YELLOW	Consat Alarms	power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:59:37	338010310	Lamp status 0H4TE	Consat Alarms	power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:59:46	338010308	Lamp status YELLOW	Consat Alarms	power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Critical	08:59:54	338010178	Lamp status RED	Consat Alarms	door CCTV (camera) 1.	Run test program in service menu. Check wires and connectors. CCTV Connection (75).
Warning	08:59:51	338010300	Lamp status 0H4TE	Consat Alarms	power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Critical	08:58:25	338010373	Lamp status RED	Consat Alarms	in open state while driving.	Run test program in service menu. Door signal is either stuck in open state, or has the wrong polarity. To clear alarm, the vehicle must be driven with doors closed.
Warning	08:57:39	338010371	Lamp status 0H4TE	Consat Alarms	power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:57:35	338010314	Lamp status 0H4TE	Consat Alarms	power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:56:49	338010348	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:56:25	338010327	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Critical	08:56:28	338010371	Lamp status RED	Consat Alarms	Door signal in open state while driving.	Run test program in service menu. Door signal is either stuck in open state, or has the wrong polarity. To clear alarm, the vehicle must be driven with doors closed.
Warning	08:56:04	338010319	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:55:22	338010326	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:55:08	338010328	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:54:57	338010354	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Critical	08:54:30	338010382	Lamp status RED	Consat Alarms	Passenger counting system (APC) problem. Cost error.	Run test program in service menu. Check connectors. (VEHICLE APC)
Warning	08:52:56	338010306	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:52:52	338010360	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Critical	08:51:16	338010178	Lamp status RED	Consat Alarms	Door signal in open state while driving.	Run test program in service menu. Door signal is either stuck in open state, or has the wrong polarity. To clear alarm, the vehicle must be driven with doors closed.
Warning	08:51:44	338010310	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:49:16	338010353	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:49:01	338010343	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:48:36	338010315	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:48:48	338010389	Lamp status YELLOW	Consat Alarms	The host 150.160.3.45 is unreachable.	IP-HOST UNREACHABLE (150.160.3.45)
Warning	08:47:47	338010386	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:46:46	338010388	Lamp status YELLOW	Consat Alarms	The host 150.160.3.50 is unreachable.	IP-HOST UNREACHABLE (150.160.3.50)
Warning	08:40:27	338010314	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)
Warning	08:40:40	338010313	Lamp status 0H4TE	Consat Alarms	The external power cable should be connected when the vehicle is parked in the depot area.	Connect the external power. If already connected, troubleshoot the connectors and the corresponding in signal to the M04 unit. (External power not connected)

Column configuration

Vehicle Details (same as in Active vehicles, including active faults, see previous chapter)

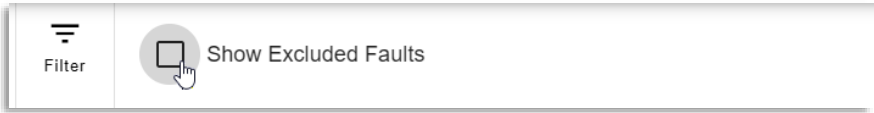
Name	Description
Severity	<p>Fault severity, with colour code (white/not critical to red/critical).</p> <p>Filter:</p> <div><div>Severity</div><div>Time</div><div>Filter</div><div><div><input checked="" type="checkbox"/> All</div><div><input checked="" type="checkbox"/> Indeterminate</div><div><input checked="" type="checkbox"/> Critical</div><div><input checked="" type="checkbox"/> Major</div><div><input checked="" type="checkbox"/> Minor</div><div><input checked="" type="checkbox"/> Warning</div></div></div>
Time	When currently active fault went active
Vehicle	Vehicle reporting the fault

Name	Description
Fault	Fault lamp status: Red/White/Yellow (related to severity, see above)
Type	Custom (Consat vehicle computer triggered) or vehicle fault sources/categories: <div><div>TypeDescription</div><div>FilterFilter</div><div><div><input checked="" type="checkbox"/> All</div><div><input checked="" type="checkbox"/> Unknown</div><div><input checked="" type="checkbox"/> Consat Alarms</div><div><input checked="" type="checkbox"/> Mid</div><div><input checked="" type="checkbox"/> Bea</div><div><input checked="" type="checkbox"/> J1939</div><div><input checked="" type="checkbox"/> Telltale</div><div><input checked="" type="checkbox"/> VP232</div></div></div>
Description	Fault description
Technical	Consat Faults: Suggested Repair Action  Vehicle Faults: Technical details

Filter Menu: Override fault exclusion

Use the filter menu to include fault types that have been individually excluded, overriding the “Exclude faults”-filter presented in the Settings section. Check the box to also see these faults.

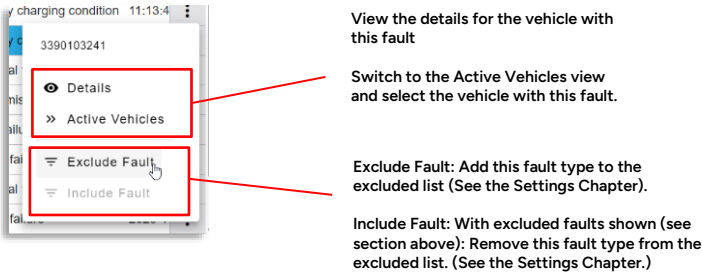
Also see the Exclude faults description below and in the Settings chapter.



Row Menu: Active Vehicle Details, Active Vehicle Link, Exclude Fault

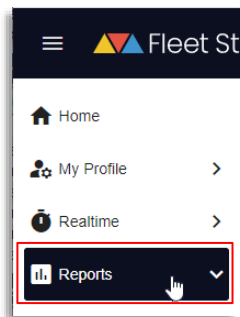
The row menu for each displayed fault allows you to:

- Open/View the active vehicle details for the vehicle that has this fault (also including any other active fault, history etc.). See the Active Vehicles chapter.
- Switch to the Active Vehicles view and select the vehicle with the fault.
- You can also manually add this particular fault type to the “excluded” list in the Settings section. The fault will then not be presented in the view, unless the Excluded faults filter is manually overridden in the Filter section, see the previous section.





## 6 Reports



- For report search description, see chapter 2.6

## 6.1 Deviation Report

The deviation report allows you to search for deviations logged during a specific period. Like in other FS reports you can export the searched list in Excel format.

**Note:** The current version of this report is designed for PTA users and only includes deviations published to 3:rd part by the PTO:s.

- For search procedure, see chapter 2.6
- For Excel export see chapter 2.7
- All published deviations, from all the companies you have access to, are included in the report. Use the Company column free text filter to only view deviations from one company. You can also filter the exported Excel file the same way.
- For sorting and filtering reports, see chapter 2.4 and 2.5

Search criteria: 2024-09-08 00:00:00 - 2024-10-08 00:00:00													
ID	Company Name	Deviation	Report timestamp	Block	Journey	Line	Destination	StopPoint	Cause	Published Comment	Modified timestamp		
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter		
5707	CiscoC@Rut	Ladingshet	2024-10-04 11:14:39						Avvik i ladeprocess/ladingshet, Ladning startar ikke	demo	2024-10-04 11:15:01		
5705	CiscoC@Rut	Hendring i trasé	2024-10-04 11:08:36	5102	101	140000015	Nydalen		Avvik i trasé/hendring i trasé, Feltparkert kjøretøy	Test publikasjonskommentar	2024-10-04 11:10:10		
5701	CiscoC@Rut	Ladingshet	2024-10-04 10:17:38						Avvik i ladeprocess/ladingshet, Ladning startar ikke	public	2024-10-04 10:17:57		
5699	CiscoC@Rut	Elektronik	2024-10-04 10:17:34	5103	102	140000015	Nydalen		Feil på kjøretøy/Elektronik, 602 - Ladning ikke	Test av QA test channel	2024-10-04 10:17:54		
5688	Unibuss@Rut	Hendring i trasé	2024-10-04 09:17:11	4208	7	61	Tjuvholmen		Avvik i trasé/hendring i trasé, Stengt vei	Test publikasjon to QA test channel	2024-10-04 09:17:51		
5685	Unibuss@Rut	Ladingshet	2024-10-04 08:36:47						Avvik i ladeprocess/ladingshet, Ladning startar ikke	public	2024-10-04 08:36:54		
5651	Unibuss@Rut	Vei- og ferieforskjutt	2024-10-03 20:03:05	4202	15	61	Tjuvholmen	Hemnespassasjen (fra Viksen skog)	Avvik i trasé/Vei- og ferieforskjutt, Oppstartet i vedbåren	Public comment	2024-10-03 20:34:49		
5625	Unibuss@Rut	IT-ulykke	2024-10-03 16:02:23	4201	9	61	Viksen skog	Tjuvholmen	Feil på kjøretøy/IT-ulykke, Annet	public comment	2024-10-03 16:08:52		
5623	CiscoC@Rut	Kjøring utenfor trasé	2024-10-03 15:49:20	5103	102	140000015	Nydalen		Avvik i trasé/Kjøring utenfor trasé, Feltparkert kjøretøy	Test of publication	2024-10-03 15:49:32		
5614	Unibuss@Rut	Rutetrukk	2024-10-03 15:25:33						Avvik i ladeprocess/Rutetrukk, Annet	public	2024-10-03 15:25:48		
5503	Unibuss@Rut	Hendring i trasé	2024-10-02 19:34:11	4205	6	61	Tjuvholmen		Avvik i trasé/hendring i trasé, Folkemengde	test 12312	2024-10-03 15:23:49		
5592	CiscoC@Rut	IT-ulykke	2024-10-03 13:08:56	2501	101	140000014	Haugerud T	Kjåsås (fra Kjåsås st.)	Feil på kjøretøy/IT-ulykke, Annet	public comment	2024-10-03 13:59:43		
5454	CiscoC@Rut	Rutetrukk	2024-10-02 15:18:02						Avvik i ladeprocess/Rutetrukk, Løskabelt ikke trukket	External	2024-10-02 15:43:55		
5390	CiscoC@Rut	Ladingshet	2024-10-02 11:00:11	5603	103	140000016	Solernskogen		Avvik i ladeprocess/ladingshet, Ladning startar ikke	test 3	2024-10-02 14:50:48		
5285	Unibuss@Rut	>15 min for sen fra startstoppeplass	2024-09-30 14:28:33	4018	179	12	Viksen skog	Grovtstasjon (mot Storgrovevannet)	Forsinkelse>15 min for sen fra startstoppeplass, Støttestrukk	Fleet Studio Deviations Test - Dette skal vises i Deviations 2	2024-09-30 14:59:56		
5239	Unibuss@Rut	Sen fra holdteplass	2024-09-30 14:21:33	4211	129	61	Tjuvholmen	Løskabelt (mot Ankerhuset)	Forsinkelse/Sen fra holdteplass, Sen fra holdteplass avgang	Fleet Studio Deviations Test 2 - editorial	2024-09-30 14:27:30		
5064	CiscoC@Rut	Sykdom ombord	2024-09-27 14:56:54	2501	134	140000019	Gronsd T via Viksen	Akkusjonen (mot Løftstasjonen)	Kundehendelse/Sykdom ombord, Tilkal ambulans	Traffic Deviation Fleet Studio pop-up - editorial 52.0	2024-09-27 15:12:10		
5038	Unibuss@Rut	Slåttekontroll	2024-09-27 10:58:57	14033	13	35	Hosle		Kundehendelse/Slåttekontroll, Tilkal polit	help	2024-09-27 11:00:38		
5037	Unibuss@Rut	Slåttekontroll	2024-09-27 10:58:57	14033	13	35	Hosle		Kundehendelse/Slåttekontroll, Tilkal polit	help	2024-09-27 10:59:14		
5036	Unibuss@Rut	Elektronik	2024-09-27 10:48:16	4201	9	61	Viksen skog	CC vest (mot Løftstasen)	Feil på kjøretøy/Elektronik, 601 - Strømmes 24V	public	2024-09-27 10:58:38		
5035	Unibuss@Rut	>10 min for sen fra startstoppeplass	2024-09-27 10:47:49						Forsinkelse>10 min for sen fra startstoppeplass, Forsinkelse		2024-09-27 10:47:59		
5030	Unibuss@Rut	Elektronik	2024-09-27 10:42:47	4013					Feil på kjøretøy/Elektronik, 601 - Strømmes 24V	public	2024-09-27 10:47:27		
5029	Unibuss@Rut	Elektronik	2024-09-27 10:42:47	4204					Feil på kjøretøy/Elektronik, 601 - Strømmes 24V	public	2024-09-27 10:44:18		
4928	Unibuss@Rut	Avgang ikke startet	2024-09-26 14:35:07	14001	36	34	Skøyen		Forsinkelse/Avgang ikke startet, Sen fra holdteplass avgang	qa	2024-09-27 10:32:43		
4924	CiscoC@Rut	>15 sek for tidlig fra holdteplass	2024-09-26 14:22:35	2504	144	140000014	Haugerud T	Vestre Allen kiste (mot Løftstasjonen)	For tidlig avgang>15 sek for tidlig fra holdteplass, Kliente tiden	public	2024-09-26 14:23:34		
4920	CiscoC@Rut	Feltparkert	2024-09-26 13:42:14	2505					Feil på kjøretøy/Feltparkert, 902 - TICU	netto	2024-09-26 13:42:32		
4508	CiscoC@Rut	Hendring i trasé	2024-09-26 08:10:31	2510	261	140000014	Mjørdalen	Haugerud T (P&B mot Trondheim)	Hendring/hendring i trasé, Feltparkert	qa test channel	2024-09-26 11:48:32		
4324	CiscoC@Rut	Elektronik	2024-09-23 10:35:14	5104					Kundehendelse/Elektronik, Annet	very important - read this	2024-09-26 10:25:26		
4309	CiscoC@Rut	Hendring i trasé	2024-09-23 12:16:48	2502	146	140000014	Haugerud T	Løftstasjonen (mot Løftstasjonen)	Avvik i trasé/hendring i trasé, Lyspåkalling	pubdash	2024-09-23 13:51:58		
4055	CiscoC@Rut	Feltparkert	2024-09-20 14:34:19	5102	105	140000015	Nydalen		Feil på kjøretøy/Feltparkert, 201 - Rapporttrans	test qa ch	2024-09-20 14:34:42		

### Column Description

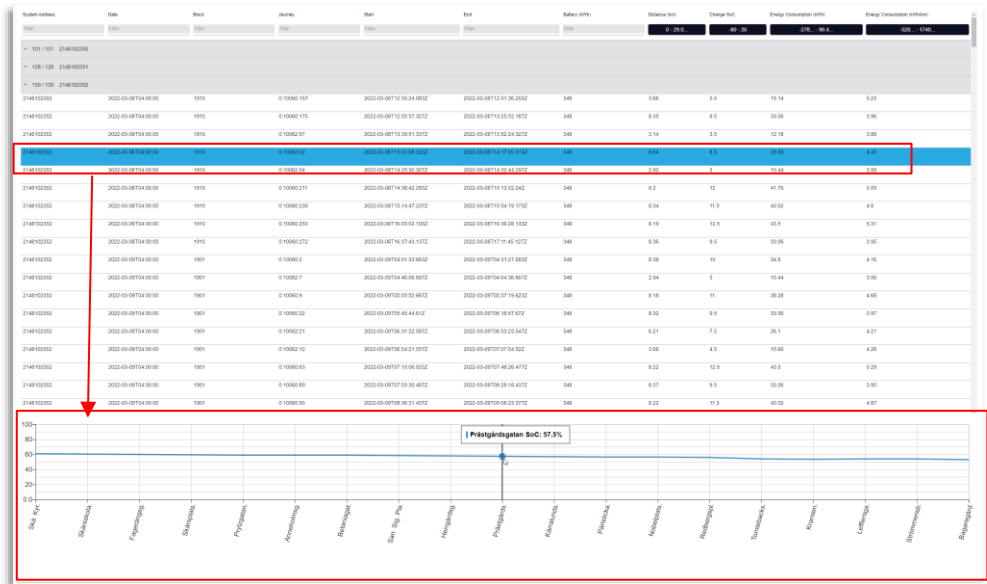
Header	Description
ID	Deviation ID, use for reference.
Priority	The priority set/configured for the deviation.
Company Name	The company (PTO) reporting the deviation
Deviation	The deviation type/specification – explaining what happened.
Deviation type	Deviation type/category (depending on configuration).

Header	Description
Line	The line serviced when the deviation occurred.
Destination	The journey destination, see Journey below.
Block	The block linked to the deviation (if available).
Journey	The journey linked to the deviation (if available).
Stop Point	The stop point linked to the deviation (if available).
Place	Where the deviation occurred, if not linkable to a traffic data node or if the deviation need to be pinned to a specific geographical position.
Cause	The cause of the deviation, as reported by traffic controller or driver (depending on deviation type and circumstances).
Published Comment	Free text comment from PTO to PTA explaining the deviation.
Calendar Day	The calendar day the deviation occurred
Report Timestamp	When the [automatically generated]deviation was created, or when the deviation occurred according to user manually creating the deviation.
Modified Timestamp	When the deviation was last changed.
Modified by	The user/system that created/or last edited the deviation
Place	Deviation geographical location if applicable (not linked to traffic data node)
Status	The deviation "ticket" status: Open/closed... etc.
Removed (filter)	If the deviation "ticket" has been removed or not.

## 6.2 Energy Report

The energy report shows energy consumption for each logged journey. For a selected journey, detailed energy consumption along the journey is displayed in a graph below the list section, see below.

### Overview



Click on a row to view SoC along the journey route, showing the consumed energy.  
Tooltip/touch the graph to view SoC at that stop point.

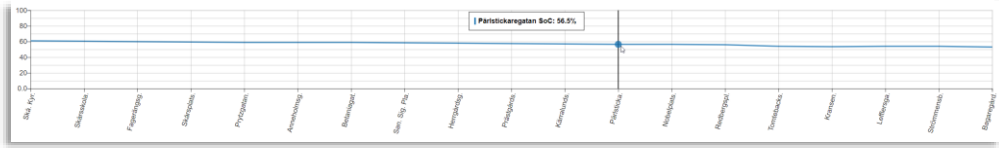
Header	Description
System Address	Vehicle System Address
Date	The date the journey was logged
Block	The block the journey is included in
Journey	Journey name/number
Start	Period starts (journey starts)
End	Period ends (journey ends)
Distance (km)	Distance driven on the journey
Battery (kWh)	Vehicle Battery capacity (if available)
Change SoC	The difference in SoC between the journey start and journey end, indicates consumption.
Energy Consumption (kWh)	Energy consumption on the journey (calculated from battery capacity and Change SoC values).

Header	Description
Energy Consumption (kWh/km)	Average energy consumption per km on the journey (calculated from [journey] distance, battery capacity and Change SoC values).

Energy Graph

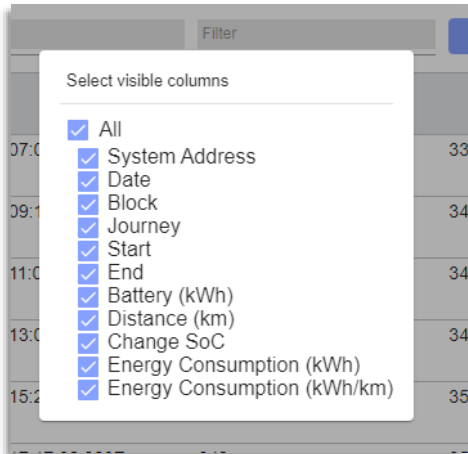
The energy graph shows the SoC level from the start to the end of **the selected journey route**. The stop points are displayed along the x-axis.

Tooltip/touch a graph section to view the Stop Point name and the SoC-value for that stop point, see below.



Configure Visible Columns

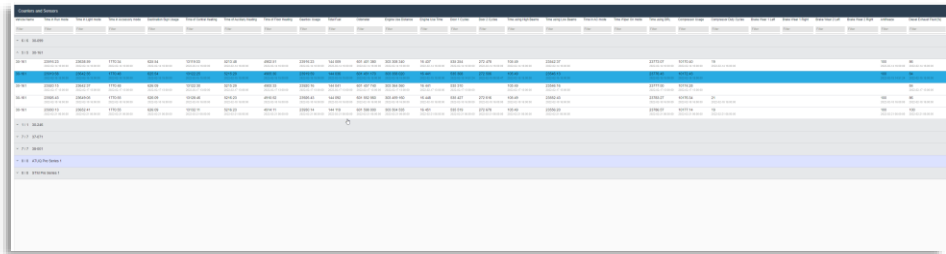
Right-click on the header section to open the “Select Visible Columns” menu (not available on touch display). Here, you can check/uncheck boxes to include or exclude columns in the presentation, to suit your needs.



### 6.3 Counters and Sensors

The Counters and Sensors overview/report presents data from and about various vehicle components. The report covers selected vehicles and a set period. Use it as a knowledge base when deciding on non-periodic maintenance, a “wear, and tear” overview for your fleet, or to get a feel for individual vehicle usage.

- Each report column has a free text filter.
- Data from each vehicle is displayed in a separate minimizable section. Here, data from all logged periods are listed. Periods are listed chronologically (first data period on top).
- Time information is presented in MM:SS format
- **Note: The most recent available value for each counter/sensor is displayed.** Below each number you will find a timestamp, showing when the presented value was logged. Note that some presented data may be older than your search period.



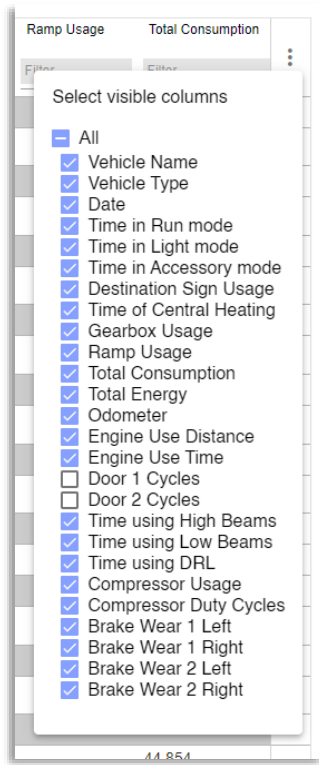
Header	Description
Vehicle Name	Vehicle Name
Time in Run Mode	Awaiting definition
Time in Light Mode	Awaiting definition
Time in Accessory Mode	Awaiting definition
Destination Sign Usage	Awaiting definition
Time of Central heating	Awaiting definition
Time of Auxillary heating	Awaiting definition
Time of Floor heating	Awaiting definition
Gearbox Usage	Awaiting definition
Total Fuel	Awaiting definition
Odometer	Awaiting definition
Engine Use Distance	Awaiting definition

Header	Description
Engine Use Time	Awaiting definition
Door 1 Cycles	Awaiting definition
Door 2 Cycles	Awaiting definition
Time Using High Beams	Awaiting definition
Time Using Low Beams	Awaiting definition
Time in AC Mode	Awaiting definition
Time Wipe on Mode	Awaiting definition
Time using DRL	Awaiting definition
Compressor Usage	Awaiting definition
Compressor Duty Cycles	Awaiting definition
Brake Wear 1 Left	Awaiting definition
Brake Wear 1 Right	Awaiting definition
Brake Wear 2 Left	Awaiting definition
Brake Wear 1 Right	Awaiting definition
Antifreeze	Awaiting definition
Diesel Exhaust Fluid	Awaiting definition

## Configure Columns (including Excel Export)

As this report includes many columns, you can choose to exclude those not needed. Open the column menu and de-select superfluous columns.

Note: Excluded columns will be minimized in the Excel export.



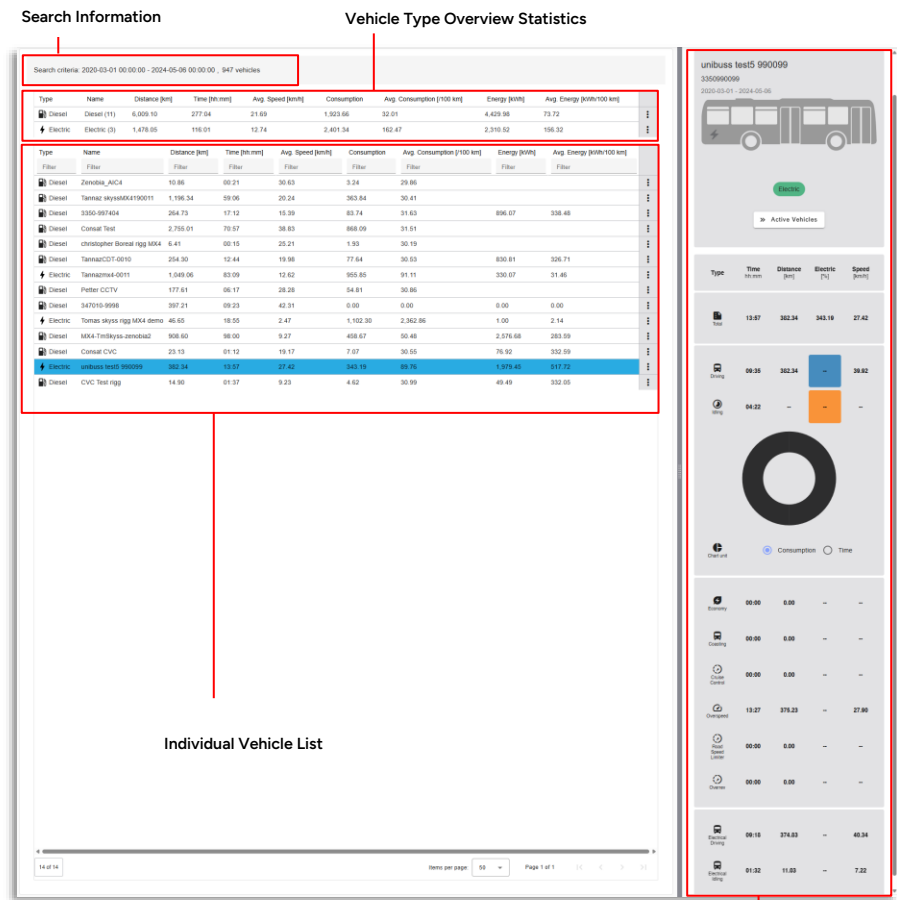


## 6.4 Vehicle Summary

The Vehicle Summary report provides just that: A Summary of key data for all searched vehicles logged during the search period. The focus of the report is vehicle usage – how much the selected vehicles have been used, and “how” (indicated by several driving style values in the details view).

- A top vehicle type overview shows **average** usage, etc. for each vehicle type included in the search, allowing general comparisons across vehicle types.
- The main vehicle list shows basic usage data like time (driving), driven distance, etc. per vehicle. Providing data for selecting/comparing individual vehicles.
- A details section can be opened from the type or vehicle list – here, more comprehensive information is displayed (depending on availability) – both related to vehicle usage and driving performance/style.
- A “View in Active Vehicles” button provides a quick link to viewing the vehicle in that real-time view.
- **Note:** Units presented depends on your user settings, see chapter 10.2

### Overview

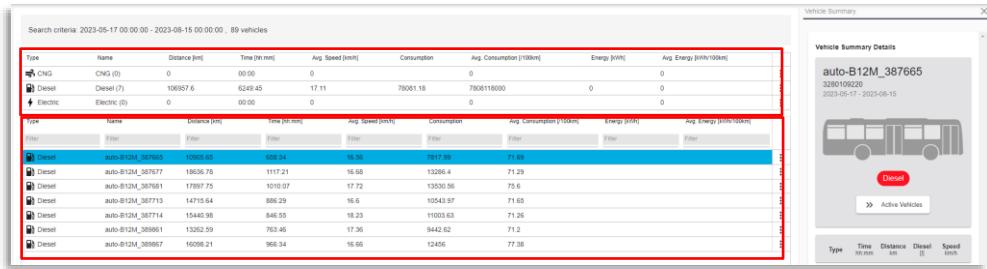


Details, Selected Vehicle

Note: Vehicle illustration shows vehicle type (bus/ferry/tram...).

Vehicle Type Overview and Individual Data, Description

The columns are identical in both sections

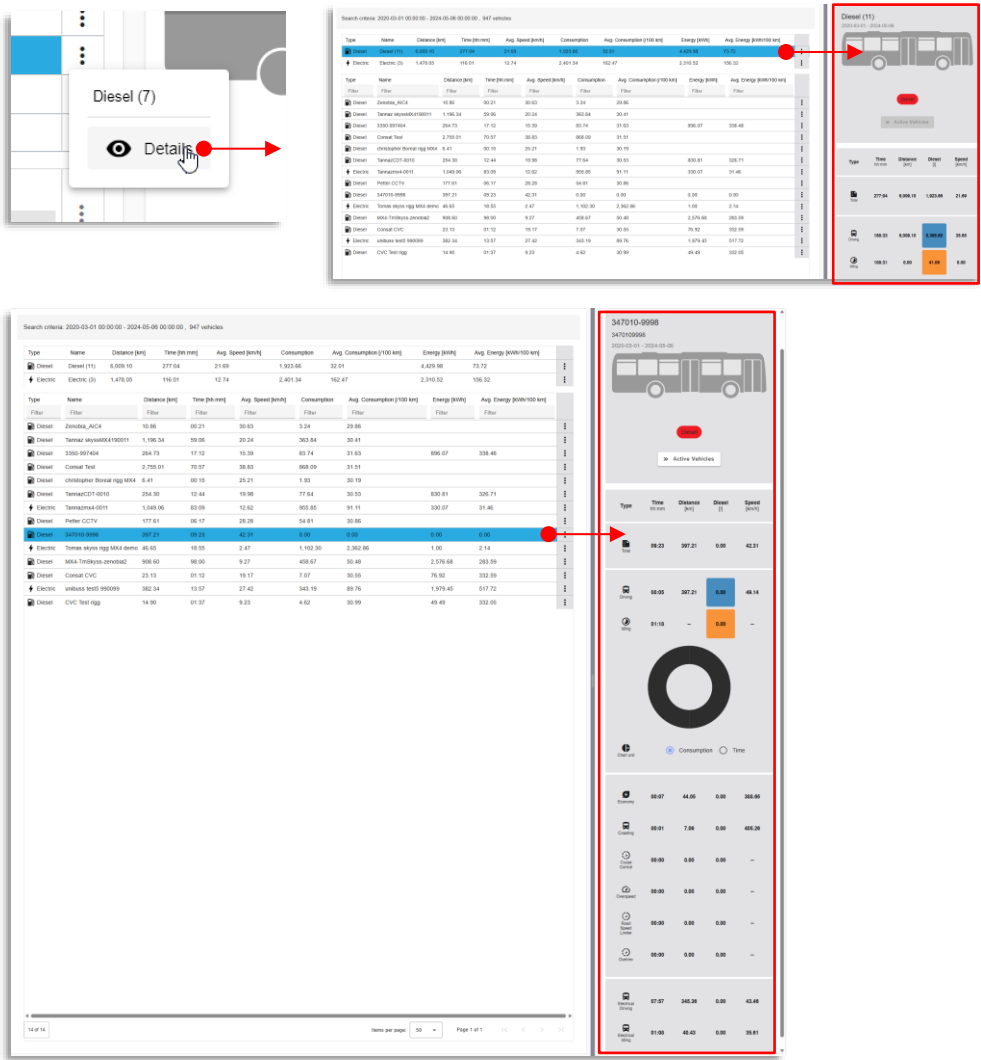


- **Note:** Units configured in User Settings, see chapter 10.2.




Header	Description
Type	Type names: CNG, Diesel, Electric + Total (all types)
Name	Overview: Type name (number of vehicles within parenthesis) Vehicle List: Vehicle name/no.
Distance	Total driven distance [configured unit]
Time [HH:MM]	Total time in use (driving + idling)
Avg Speed	Average Speed [configured unit]
Consumption	Total consumption (unit depending on the type and Setting, see chapter )  Electric: [configured unit]  Diesel: [configured unit]  CNG: kg
Avg. Consumption	Average consumption [configured unit]
Energy	If available, Consumed energy in [configured unit]
Avg. Energy	Average consumed energy [configured unit]

Type/Vehicle Details, Description

You can view **details for both vehicle types and individual vehicles**. The details view is accessed through the corresponding row menu. With details open you can click to change row or use the arrow keys to quickly move up/down in the list.



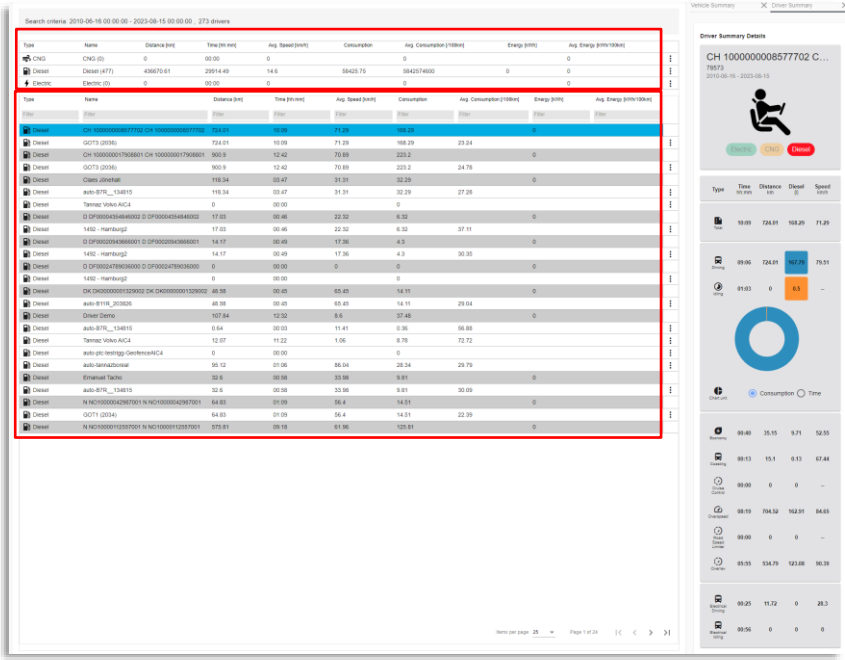
- **Note:** Units configured in User Settings, see chapter 10.2.

Header		Description					
Type Section		Headers for underlying section columns, including units.  [configured units]					
<table><tr><th>Type</th><th>Time hh:mm</th><th>Distance km</th><th>Fuel l</th><th>Speed km/h</th></tr></table>		Type	Time hh:mm	Distance km	Fuel l	Speed km/h	
Type	Time hh:mm	Distance km	Fuel l	Speed km/h			
Total Section		Total values – mirroring the data in the list (averages for vehicle type details)  [configured units]					
<table><tr><td> 27:32 546.07 257.38 19.83</td></tr><tr><td>Total</td></tr></table>		 27:32 546.07 257.38 19.83	Total				
 27:32 546.07 257.38 19.83							
Total							





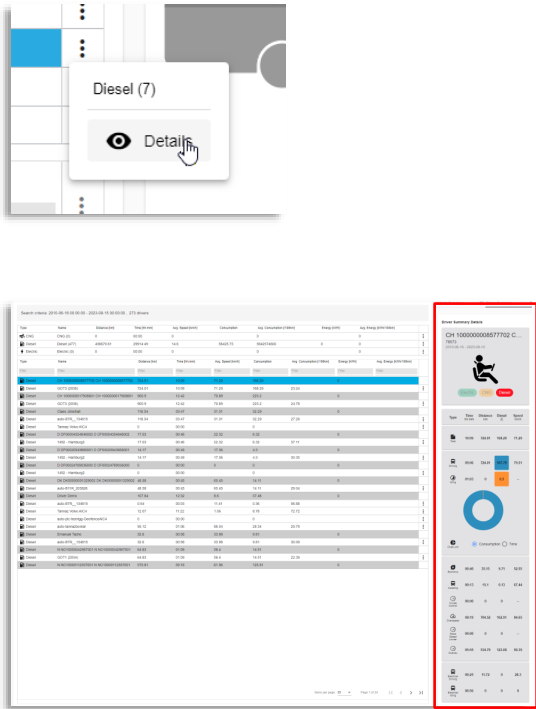
Vehicle Type Overview, Driver List, Description








































Header	Description
Type	Type names: CNG, Diesel, Electric + Total (all types)
Name	Overview: Type name (number of vehicles within parenthesis) Driver List: Driver name/no.
Distance	Total driven distance
Time [HH:MM]	Total time in use (driving + idling)
Avg Speed	Average Speed [configured unit]
Consumption	Total consumption (unit depending on the type) Electric: [configured unit] Diesel: [configured unit] CNG: kg
Avg. Consumption	Average consumption [configured unit]
Energy	If available, Consumed energy in [configured unit]
Avg. Energy	Average consumed energy [configured unit]

Total/Driver Summary Details: Description

You can view details for both the total section and individual drivers. This view is accessed through the corresponding row menu:



Header	Description										
<div>Type Section</div> <div><table><tr><th>Type</th><th>Time</th><th>Distance</th><th>Fuel</th><th>Speed</th></tr><tr><td></td><td>hh:mm</td><td>km</td><td>l</td><td>km/h</td></tr></table></div>	Type	Time	Distance	Fuel	Speed		hh:mm	km	l	km/h	Headers, including units [configured], for underlying sections
Type	Time	Distance	Fuel	Speed							
	hh:mm	km	l	km/h							
<div>Total Section</div> <div><table><tr><td> Total</td><td>27:32</td><td>546.07</td><td>257.38</td><td>19.83</td></tr></table></div>	 Total	27:32	546.07	257.38	19.83	Total values – mirroring the data in the list.					
 Total	27:32	546.07	257.38	19.83							
<div>Driving/Idling Section</div> <div><div><div><div> Driving</div><div>09:06</div><div>724.01</div><div>167.79</div><div>79.51</div></div><div><div> Idling</div><div>01:03</div><div>0</div><div>0.5</div><div>--</div></div></div><div></div><div><div> Chart unit</div><div><input checked="" type="radio"/> Consumption <input type="radio"/> Time</div></div></div>	<p>This section shows data divided into driving and idling (relevant for diesel/CNG vehicles). You can view the relation between driving and idling in a pie chart.</p> <p>Click on "Consumption" or "Time" to either view the fuel/energy consumed or the time driving/idling in the pie chart.</p>										

Header	Description																																								
<div>Driving Style Section</div> <table><tr><td> Economy</td><td>05:05</td><td>158.85</td><td>68.75</td><td>35.29</td></tr><tr><td> Coasting</td><td>07:03</td><td>140.61</td><td>17.92</td><td>19.99</td></tr><tr><td> Teethness</td><td>00:00</td><td>0</td><td>0</td><td>0</td></tr><tr><td> Cruise Control</td><td>00:00</td><td>0</td><td>0</td><td>0</td></tr><tr><td> Overspeed</td><td>00:00</td><td>0</td><td>0</td><td>0</td></tr><tr><td> Road Speed Limiter</td><td>00:00</td><td>0</td><td>0</td><td>0</td></tr><tr><td> Togear</td><td>00:00</td><td>0</td><td>0</td><td>0</td></tr><tr><td> Overrev</td><td>00:12</td><td>13.61</td><td>9.51</td><td>46.87</td></tr></table>	 Economy	05:05	158.85	68.75	35.29	 Coasting	07:03	140.61	17.92	19.99	 Teethness	00:00	0	0	0	 Cruise Control	00:00	0	0	0	 Overspeed	00:00	0	0	0	 Road Speed Limiter	00:00	0	0	0	 Togear	00:00	0	0	0	 Overrev	00:12	13.61	9.51	46.87	<p>This section presents values for several driving style-related events and measurements.</p> <p>You can use them to assess a driver's general driving style</p>
 Economy	05:05	158.85	68.75	35.29																																					
 Coasting	07:03	140.61	17.92	19.99																																					
 Teethness	00:00	0	0	0																																					
 Cruise Control	00:00	0	0	0																																					
 Overspeed	00:00	0	0	0																																					
 Road Speed Limiter	00:00	0	0	0																																					
 Togear	00:00	0	0	0																																					
 Overrev	00:12	13.61	9.51	46.87																																					
<div>Electric Section</div> <table><tr><td> Electrical Driving</td><td>00:00</td><td>0</td><td>0</td><td>0</td></tr><tr><td> Electrical idling</td><td>00:00</td><td>0</td><td>0</td><td>0</td></tr></table>	 Electrical Driving	00:00	0	0	0	 Electrical idling	00:00	0	0	0	<p>This section presents electric-specific values corresponding to the driving/idling presentation for diesel/CNG vehicles.</p>																														
 Electrical Driving	00:00	0	0	0																																					
 Electrical idling	00:00	0	0	0																																					

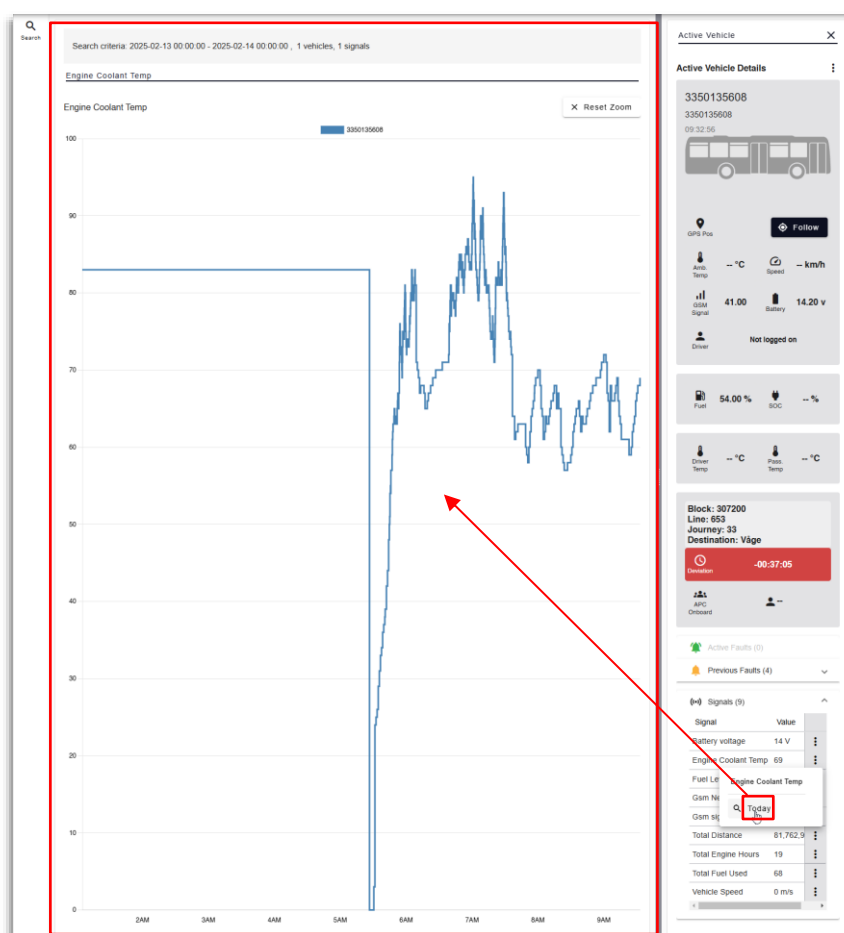


## 6.6 Signal Viewer

This simple “report” graphically and numerically presents the levels of one or more signals, from one or more vehicles, over time. Use it to analyse and compare signals, for instance when troubleshooting sensor data etc.

CAN Faults (if available) can also be included in the graph to check correlations between signals and faults.

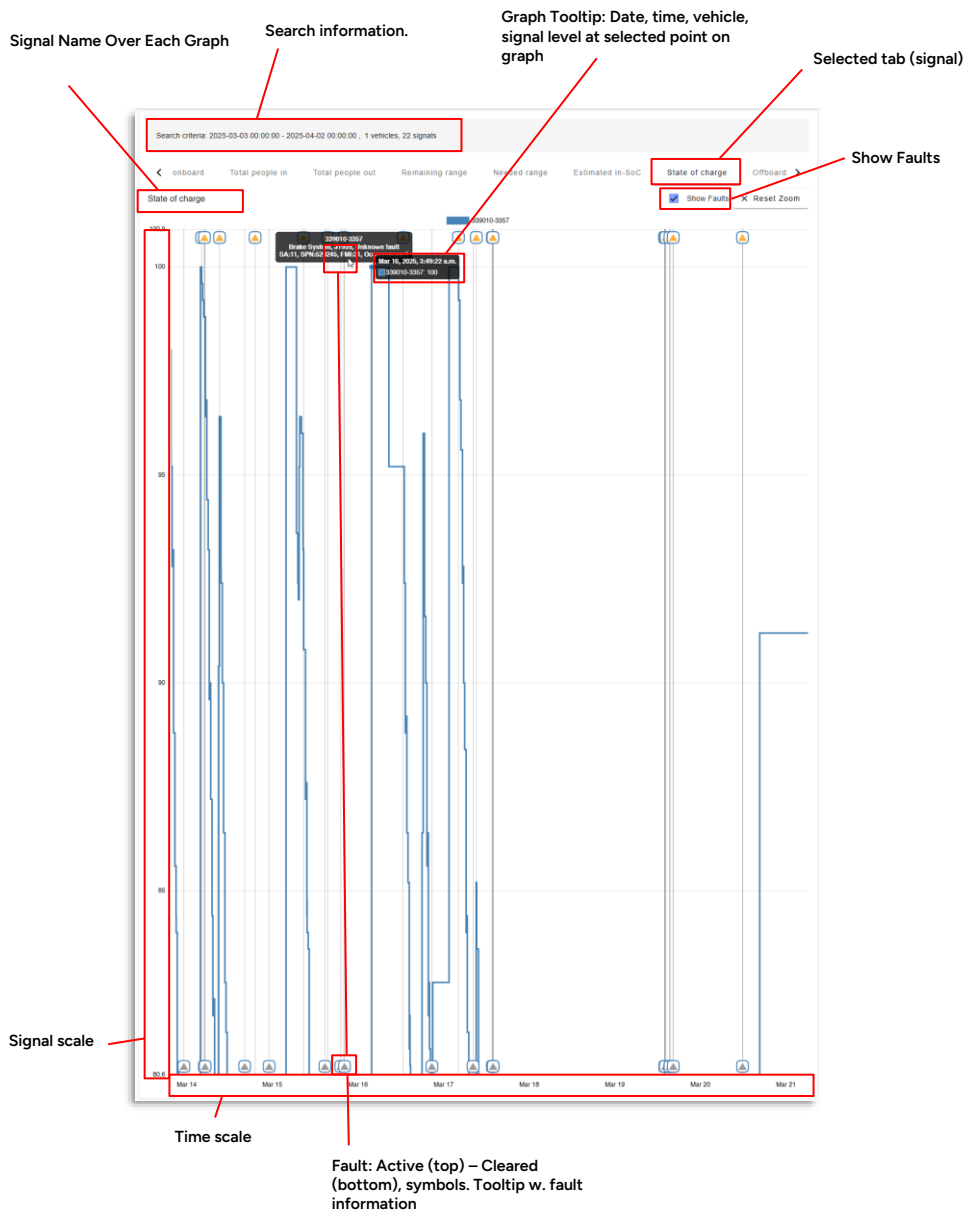
- The search includes three steps: Period, vehicles and vehicle signals.
- Note: You can select a vehicle, *the current day* and one specific signal to view in Signal Viewer in the details section of the active vehicles view. This is the quickest and probably the most convenient way of using the report. See the example below showing the engine coolant temperature “today”:



- After you first searched the report using the Active vehicle details shortcut menu, you can of course open the search section to add vehicles and signals to the view and perform a new search.

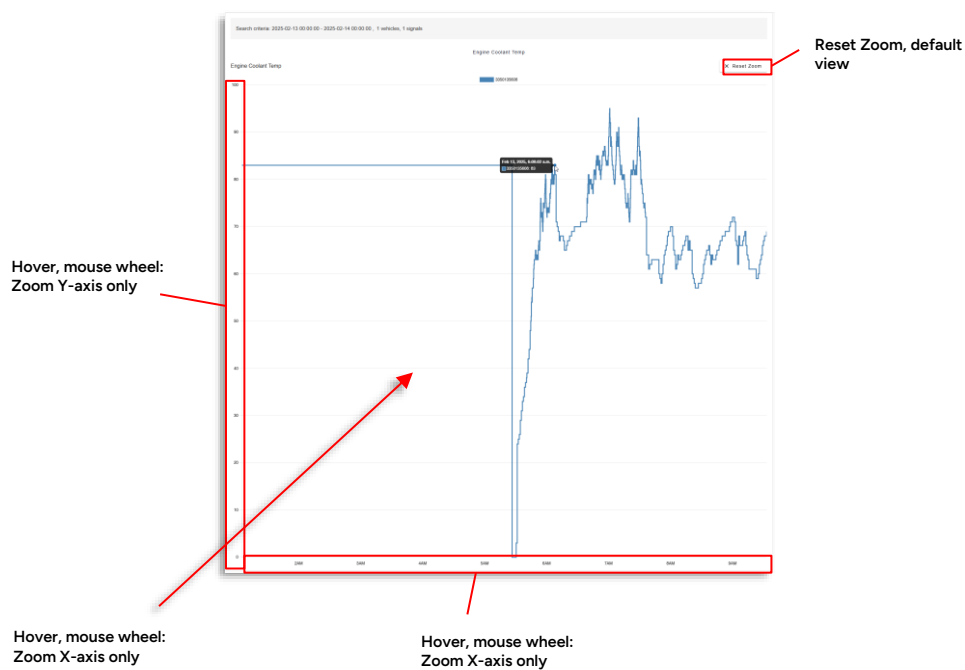
## Report Graph Overview

- The report view consists of one or more graphs showing signal levels (y) for the searched signals/vehicles over the selected period (x).
- Multiple signal graphs resulting from your search are displayed on separate tabs. See below:
- To view **Faults** (activations/clearances), check the “Show Faults” box. Tooltip symbols to get fault information. See description below.



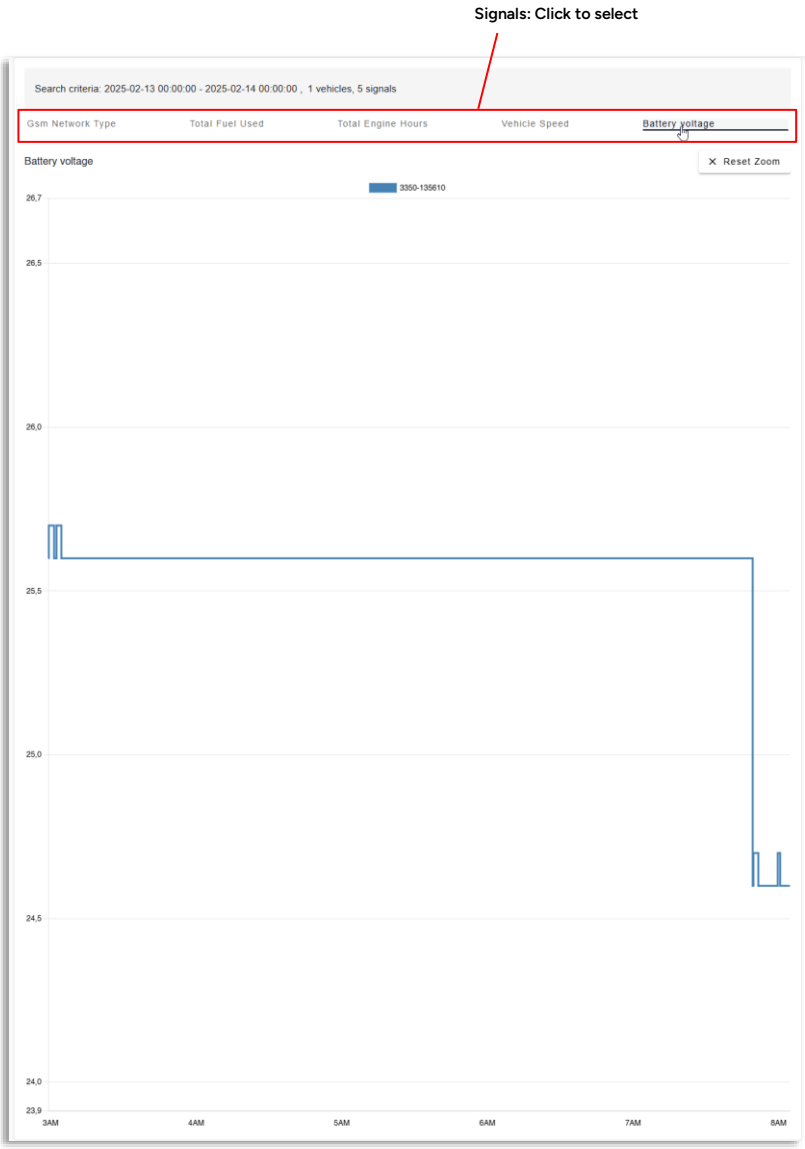
## Zoom (Y, X axis)

- You can click/touch and drag the graph to view specific graph parts.
- Use the mouse wheel with the pointer in the graph field to zoom in/out.
- Hover over the Y-scale and use the mouse wheel to only zoom the value dimension.
- Hover over the X-scale and use the mouse wheel to only zoom the time dimension.



## Multiple Signals Searched: Separate Tabs

- With multiple signals included in the search you can switch between the graphs by clicking on the signal names above the graph section.



## 6.7 Coaching reports: Reference Values

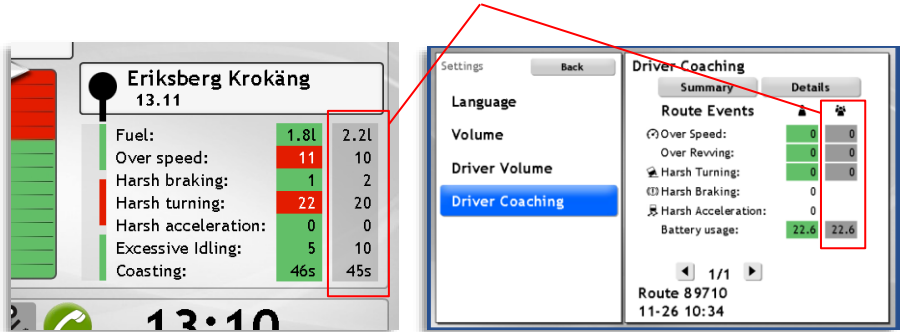
- The reference values displayed in coaching reports are average event counts and energy consumption reported by each vehicle system.
- **Each vehicle system logs averages for the routes/route sections and periods/day it travels.** The ten latest measurements make up the averages. The averages are presented to the driver as a reference in the coaching summary after each journey is completed.
- That only the specific vehicle's "experience" makes up the reference makes energy consumption comparisons more precise, avoiding "apples to pears" comparisons, but it also affects the amount of data available when comparing driving behaviour, etc. All reference values are marked grey (see below).

**Note that for a journey to have a reference value, the vehicle must have a valid "experience" of that route driven at the relevant time, thus not all logged journeys will have a reference. The coaching rating/percentages are based on journeys with reported references.**

**(The "detailed" coaching report views also show data for "no reference journeys".)**

- The reference values are a reliable way of assessing a driver/vehicle as they are based on the same vehicle/traffic where the consumption is logged and events are counted.
- In the coaching reports, the reference values for energy consumption from each included vehicle/route are averaged to make up a reliable reference for the searched data. The reference values for driver coaching events are summed.

The driver coaching summary in the vehicle: Reference values/counts for the driven journey (route+time period).  
Note that these are based on the particular vehicle's previous traffic, not how other vehicles+drivers have performed.



The reference values from each journey are averaged (consumption)/summed (events) in the coaching report



## 6.8 Driver Coaching

The Driver Coaching report is designed for comparing the energy use and passenger comfort-related coaching events (harsh braking, etc.) for any number of selected drivers, during the searched period.

Taken together, this information provides a clear indication of the drivers driving style. Use it as a basis for coaching drivers to drive more economically and smoother for better passenger comfort.

- The main report is a simple list that can be filtered and sorted to quickly find drivers that stand out when it comes to energy consumption and comfort-related driver coaching events (harsh braking, turnings, etc.).
- The comparison is based on the reference values (see the previous chapter) reported by the vehicles. The driver is thus compared to each driven vehicle's own "experience" of the same route at the same time of day.
- In a details section, actual energy consumption and the number of comfort-related events for a selected driver are available. A "detailed details" mode is also available including journeys that have no reference values (see the previous chapter for an explanation).
- **Note:** The reference values are created and reported by the individual vehicles. If one driver always uses the same vehicle and no one else drives the particular routes/journeys in this vehicle, he/she will be compared with him/herself. Normal driver rotation will solve this "problem".

Overview

Note: Driver numbers covered in screenshot.

Score Range filters: Use to only list drivers w scores within the set range(s).

Filter, column control menu

Search criteria: 2025-03-27 00:00:00 - 2025-04-03 00:00:00 , 4563 drivers

Driver	Vehicles	Distance [km]	Energy Score	Comfort Score
0	3	151.85	75.00	100.00
2	3	609.47	58.06	100.00
2	4	801.53	58.46	100.00
2	4	440.96	61.96	100.00
0	1	128.82	27.27	100.00
2	1	152.51	61.54	92.31
0	2	164.41	58.33	100.00
0	4	588.75	53.66	97.56
3	4	166.78	40.00	90.00
0	3	647.21	83.33	90.00
3	2	375.69	64.71	58.82
0	2	364.40	15.64	72.73
2	2	280.77	92.31	100.00
1	3	393.06	71.43	90.48
0	2	401.10	85.71	95.24
2	3	500.76	68.00	96.00
0	2	304.67	80.00	93.33
1	2	891.47	65.71	97.14
3	2	1,009.61	84.62	76.92
2	3	253.23	58.46	61.54
2	2	127.58	68.89	77.78
2	4	352.80	47.62	71.43
2	3	451.96	76.00	80.00
2	2	179.13	100.00	60.00
3	4	521.40	93.33	80.00
1	1	331.73	53.85	100.00
3	1	296.45	61.54	61.54
0	3	231.92	25.00	100.00

Driver Coaching

Driver Coaching Details

2025-03-27 - 2025-04-03

Energy consumption

Rating

61.9%

Value

Ref.

1,388.02

1,400.26

Average Adj. Energy [kWh/mile]

314.78

average energy score last 6 months

Comfort

Rating

100%

Value

Ref.

0

0

0

1

0

0

average comfort score last 6 months

View details

Driver List: Sort and Filter to find drivers with "good" or "bad" ratings.

Driver Coaching Details, selected driver (row). Standard mode. (Only including journeys w. reference data.)

Header	Description
Driver	Driver name/number
Vehicles	The number of vehicles the driver has driven during the searched period.
Distance	Total driven distance, all vehicles. (Use for relating other presented data/score).
Energy Score	<p>Energy rating: The percentage of journeys the driver has consumed less energy than the reference (route average). 100 = always better than the average/reference.</p> <p>Filter (band pass): Drag sliders to only include drivers with score inside the set range.</p>
Comfort Score	<p>Comfort rating: The percentage of journeys the driver has triggered less "harsh" coaching events than the reference (route average). 100 = always better than the average/reference.</p> <p>Filter (band pass): Drag sliders to only include drivers with score inside the set range.</p>

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Driver Coaching Details, Description

This view is accessed through the corresponding row menu.

Switch between “standard” detailed view and an extra detailed, detailed view, also including data from journeys without reported reference data. (Note: These journeys will not affect the rating/coaching comparisons).

- Presentation of only journeys with reference data is called “Adjusted”(Adj). Presentation including all journeys is called “Real”. See the detailed view below.

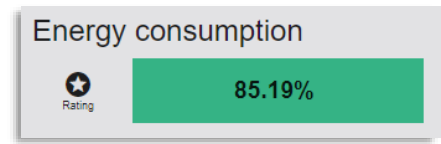


Section	Description
Driver Name/Number, Period	The driver number (/name), searched period
Punctuality	Not in use in the current version.



Energy Consumption

Rating section: The percentage of times/journeys the driver is better than or equal to average/reference when it comes to energy consumption. If better than or equal to 50% = green highlight.



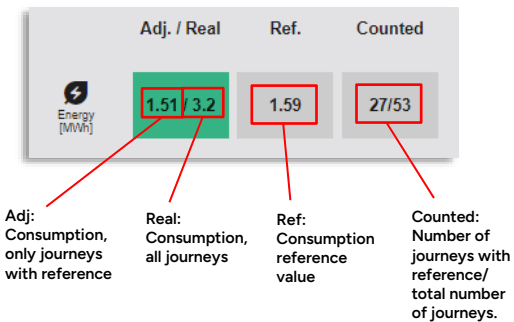
Energy sub-section

Standard view: The total energy consumed during the search period + total reference (consumption) for included journeys. Only journeys with reference are included.  
If equal or better than ref = green highlight.



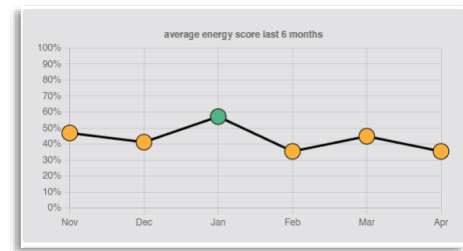
Detailed view: All Journeys

Here, data for journeys without reference is added. Note that this "unreferenced" data does not affect the [above] rating.



Average Energy: Shows avg **adjusted** energy/km (setting)

Note: Conversion factor used: 1 litre diesel = 10,722 kWh. Diesel and electric vehicles are included.

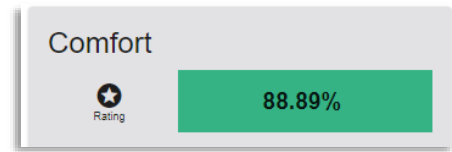


Section	Description
	The energy score graph shows the monthly average score the last 6 months to (hopefully) indicate improvements over time.

Comfort

Comfort rating: The percentage of times/journeys the driver beat or was equal to the comfort reference (with a lower/equal total harsh event count, compared to the reference)

If equal to or better than 50% = green highlight.



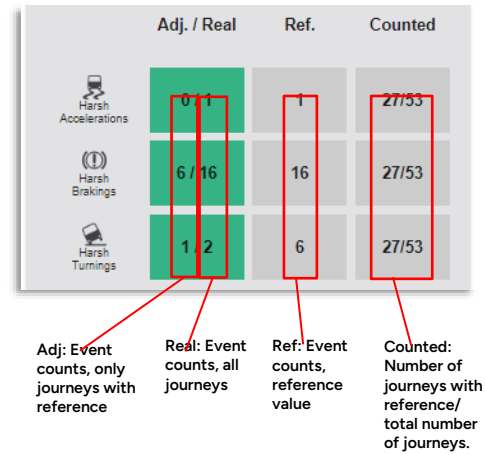
Comfort sub-section

Standard view: The total individual harsh event counts and corresponding reference numbers. Only journeys with reference are presented. If better/lower than or equal to ref = green highlight.

	Value	Ref.
Harsh Accelerations	0	1
Harsh Brakings	6	16
Harsh Turnings	1	6

Detailed view: All Journeys

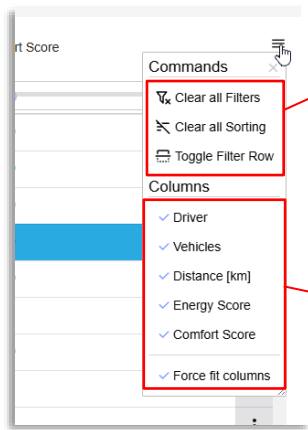
Here, journeys without reference are also included, for comparison.



Section	Description
	The comfort score graph shows the monthly average score the last 6 months to (hopefully) indicate improvements over time.

Filter, Column Control Menu

Use the Control menu to access filter functions spanning all filters and to configure/control the column presentation.



**Filter controls:**

- Clear all filter settings (free-text, range).
- Clear Sorting (revert to default)
- Toggle (show/hide) filter section.

**Column controls:**

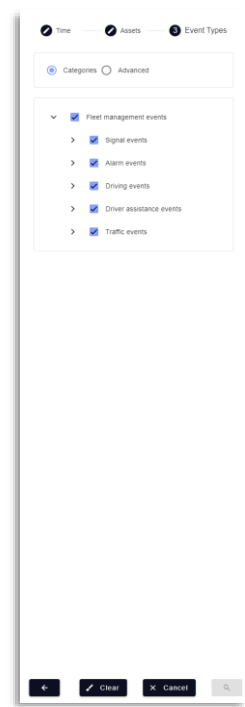
- Show/hide individual columns
- Force fit columns to current window (if possible).

## 6.9 Vehicle Events

This report allows you to search, filter and sort both vehicle (Fleet Management) related and Traffic related events.

(The searched and displayed events can of course be exported and you can subscribe to event reports to get periodic updates on specific events.)

- The search is performed in three stages: Time selection > Assets Selection > Event Type Selection.
- In the last, Event Type selection stage, you can choose types from either selected event categories, where each category includes specific event types, or from the “full list” of event types (the Advanced event selection). Only in the Advanced selection is all event types available.



- The report will load in the background, if needed. This is indicated by the top loading progress indicator. You can stop the background loading with the Cancel button. The events already loaded will be kept in the report.
- The presentation consists of both a list and a map. Select an event in the list and it will be selected on the map and the other way around.

Overview

Loading Progress Indicator. Click "Cancel" to stop [background] loading. (Closes when loading is completed.)

Search overview: Period, Events, Vehicles

Page Navigator (Menu: Events [Items] per page)

Event Details Tab, opened with the row menu in the event list

Event List: Sort and Filter to find events of interest.

[List] View: Not grouped (default)/ Grouped by Event type/ Grouped by Vehicle

Vehicle Event

Vehicle Event Details

339012-3068

3390123068

2024-09-12 00:00:05

No description available

Vehicle driving

18.7°C

1.00 km/h

100.00

27.50 v

78.00 %

540,211.30 km

18.8°C

Signals (20)

Map view.

All listed events (after filtering) presented. Symbols related to those in the list. Heat map shows geographic event density (hotspots). Lines shows route of vehicle related to selected event.

Note: If a selected event does not include position, it will not be displayed on the map. "No position found" is displayed.

Map controls (See the Overview Map chapter for descriptions). Map layer control allow you to only view the heatmap layer, for instance:

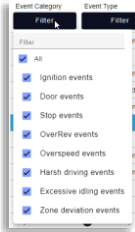
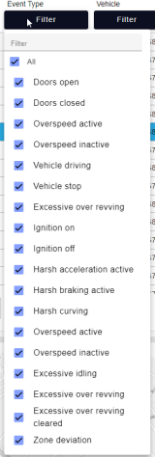
Click and drag to move map.

Right-click and drag up/down to tilt map.

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Header	Description
Event Category	<p>Shows the category the event belongs to. Also see the search section where you can choose to include specific categories. The filter allows you to include/exclude categories in/from the presentation.</p> 
Event Type	<p>Symbol + name of event type</p> <p>The filter allows you to include/exclude types:</p> 
Vehicle	<p>Vehicle name/no. Use the filter to only view one vehicle or a sub selection of the searched vehicles.</p> <p><b>Tip:</b> With only one vehicle included you can step through the event list with the arrow keys to “play back” the logged event   chronological order.</p>
Driver	Logged-in Driver (if available).
Event Description	Short description of the event (if available, not all events have descriptions). Signals include levels/change.
Timestamp	The time (and date) the event was triggered

Event Details, Description

This view is accessed through the corresponding row actions menu.  
Several sections show all available information related to the selected event.

Vehicle Event

Vehicle Event Details

auto-B12M\_387681

3280109224

2024-07-22 00:01:58

Vehicle stop

No description available

Amb. Temp19.3°C

Speed-- km/h

OSM Signal--

Battery28.20 V

DriverNot logged on

Fuel50.00 %

Odometer414,784.32 km

SOC-- %

Remaining Range-- km

Driver Temp--°C

Pass. Temp88.0°C

APC Onboard

--

(13) Signals (13)

Signal	Value
Axle 1 Weight	6085
Axle 2 Weight	9163
Axle 3 Weight	7280
Axle 4 Weight	5835
Battery voltage	28 V
Engine Coolant Temp	76
Fuel Consumption	892.76
Fuel Level	50

Event Type (Symbol, Name)

Vehicle

Time Stamp

Vehicle Door Status

Basic Vehicle, Driver Info

Fuel, Odometer, SoC, Remaining range



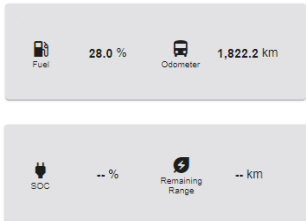

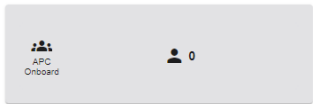
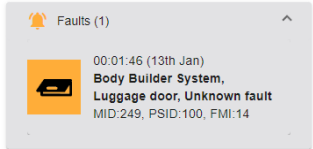
Climate

APC

Faults (active when event was logged)

Signals



Section	Description
	<p>Event Type (Symbol, Name, info) Vehicle Name/Number</p> <p>Time Stamp: Date, Time Vehicle Door Status: Image shows door closed/open status.</p>
	<p>Ambient Temperature in Degrees Celsius</p> <p>Speed: Vehicle speed when event was triggered [km/h]</p> <p>GSM Signal [Strength]: 0-100 signal level</p> <p>Battery (combustion engine battery): Battery voltage (24V nom.)</p> <p>Driver: Name/No., if logged on</p>
	<p>Fuel (diesel): % of full tank</p> <p>Odometer [km]: Total mileage</p> <p>SoC: % Battery level, electric vehicle</p> <p>Remaining Range [km]: Remaining range (vehicle drivetrain data, if available)</p>
	<p>Driver Temp: Temperature in driver compartment (Degrees Celsius)</p> <p>Passenger Temp: Temperature in passenger compartment (Degrees Celsius)</p>
	<p>APC Onboard: The number of passengers onboard when event triggered</p>
	<p>The number of active faults within parenthesis, when event was logged,.</p> <p>Time stamp showing when the fault was triggered.</p> <p>Fault code, description, symbol, if available.</p>

Section	Description																																						
Signals	<div><div>Signals (18)</div><table><tr><th>Signal</th><th>Value</th></tr><tr><td>Axle 1 Weight (2031)</td><td>5437</td></tr><tr><td>Axle 2 Weight (2032)</td><td>8816</td></tr><tr><td>Battery voltage</td><td>27 V</td></tr><tr><td>Engine Coolant Tem...</td><td>60</td></tr><tr><td>External temperature</td><td>-3.59375</td></tr><tr><td>Fuel Consumption (...)</td><td>507.21</td></tr><tr><td>Fuel Level (411)</td><td>28</td></tr><tr><td>Gsm Network Type (...)</td><td>13</td></tr><tr><td>Gsm signal strength</td><td>100</td></tr><tr><td>Inside Passenger T...</td><td>12.6</td></tr><tr><td>Internal temperature</td><td>12.5974998474121</td></tr><tr><td>Outside Temperatur...</td><td>-5.8</td></tr><tr><td>People onboard</td><td>0</td></tr><tr><td>Total Distance (409)</td><td>395,486,220</td></tr><tr><td>Total Engine Hours...</td><td>866</td></tr><tr><td>Total Fuel Used (4...</td><td>7,651</td></tr><tr><td>Total people in</td><td>0</td></tr><tr><td>Total people out</td><td>0</td></tr></table></div> <div><p>The number of available signals within parenthesis.</p><p>Signal listed with name and value, availability is vehicle/system dependent.</p></div>	Signal	Value	Axle 1 Weight (2031)	5437	Axle 2 Weight (2032)	8816	Battery voltage	27 V	Engine Coolant Tem...	60	External temperature	-3.59375	Fuel Consumption (...)	507.21	Fuel Level (411)	28	Gsm Network Type (...)	13	Gsm signal strength	100	Inside Passenger T...	12.6	Internal temperature	12.5974998474121	Outside Temperatur...	-5.8	People onboard	0	Total Distance (409)	395,486,220	Total Engine Hours...	866	Total Fuel Used (4...	7,651	Total people in	0	Total people out	0
Signal	Value																																						
Axle 1 Weight (2031)	5437																																						
Axle 2 Weight (2032)	8816																																						
Battery voltage	27 V																																						
Engine Coolant Tem...	60																																						
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Fuel Consumption (...)	507.21																																						
Fuel Level (411)	28																																						
Gsm Network Type (...)	13																																						
Gsm signal strength	100																																						
Inside Passenger T...	12.6																																						
Internal temperature	12.5974998474121																																						
Outside Temperatur...	-5.8																																						
People onboard	0																																						
Total Distance (409)	395,486,220																																						
Total Engine Hours...	866																																						
Total Fuel Used (4...	7,651																																						
Total people in	0																																						
Total people out	0																																						

Step through a series of events

To analyse a searched sequence of events, you can **step through the list with the arrow up/down keys** and view the currently selected event on the map.

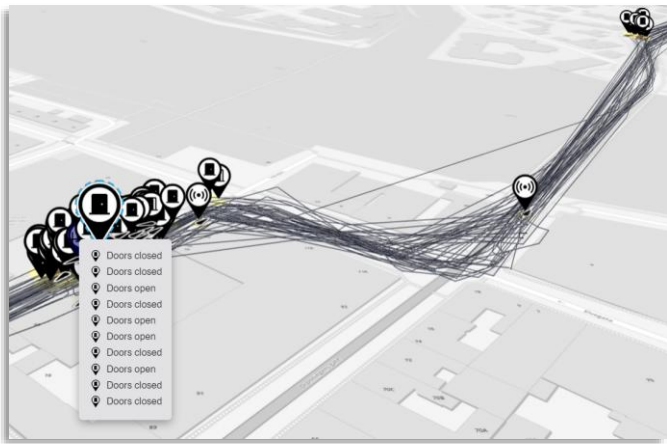
If the list is filtered or grouped to show events from one vehicle at a time, the map and list will animate the progress and events along the path of the vehicle as you step through the list.

Find hot spots with the heat map

The heat map and event type filters (both search and presentation) work well when you want top find where a certain type of event(s) occur most frequently.

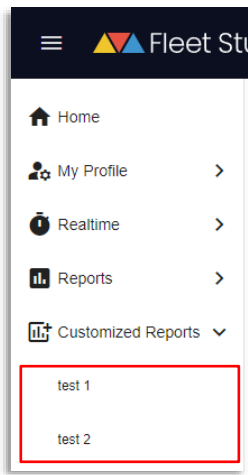
**Use the map layer control to only view heatmap** for a clean presentation of the hot spots (places with higher event density), then add more layers to add events etc.

**Tooltip and click on the events in a hot spot** to get more information and select an event to also select it in the list (including showing details in the details section).



Also filter the vehicle selection and/or use the timestamp filter to get quick feedback on which vehicles are involved and when the hotspots occur.

## 6.10 Customized Reports

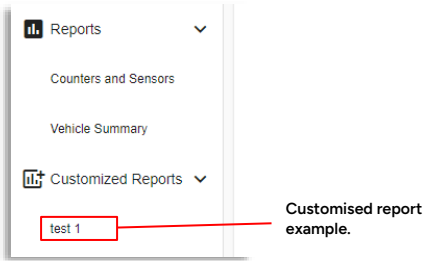


Customized Reports are listed in a separate section. These reports are very simple “lists”/spreadsheets with one or more columns selected and sorted by you. In essence, they are user-defined and named subsets of the Counters and Sensors Report.

- Create, view and edit all your customized reports in the My Profile section, under Customized Reports. See chapter 10.1
- Access all your customized reports under Customized Reports in the main menu.
- Search, export, and subscribe to customized reports just like other reports, see chapters 2.5-2.7.

### Use Customized Reports

All your customized reports are found in the separate Customized Report section, see below.



They are searched, displayed, sorted, filtered, exported, and subscribed to, just like any other report. As the content is variable, we cannot define column content, etc. here.

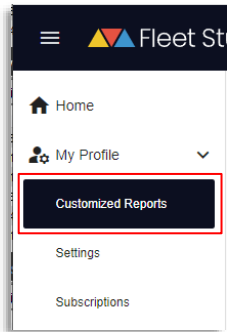
### Signals Available for Customized Reports

The list of signals available for inclusion in your customized reports will expand with time and may also be “tweaked”. There is no fixed list of signals available as of now.

## My Profile > Customized Reports (My Customized Reports)

In the **My Profile** section, click on the **Customized Reports** menu item to view a list of all your customized reports. This view provides basic information about each report, and gives access to row menu functions for **editing** and **deleting/removing** customized reports.

A “Create” button lets you create a new customized report.



### My Customized Reports: Overview

**Add/Create new Customized Report**

Name	Search Mode	Columns
test 1	Vehicle	Distance, AdbBlue, Harsh Acceleration, CO2/km, CO/km, Harsh Braking, NC/km
test 2	Vehicle	Total AdbBlue, AdbBlue, Total Driven Distance, Distance, Doors Opened

**Report Menu:**

- Details:** See included signals.
- Edit Report** (The same menus as when creating a customized report)
- Remove Report** (Report is immediately removed.)

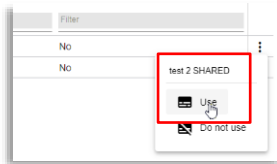
**List:** All your customized reports

### Shared Customized Reports

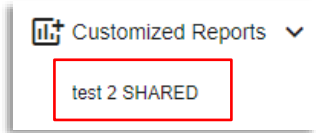
Users can choose to share customized reports with other users in the same system. (Those with access to the same operators' data). The reports shared by other users are listed under “Share Customized Reports”. You can use but not edit or remove customized reports created by others and shared with you.

Shared Customized Reports			
Name	Search Mode	Columns	Used by You
Filter	Filter	Filter	Filter
test 2 SHARED	Vehicle	Total Diesel Engine Start Count, Alcoholock, ABS, Brake Activations, Excessive Idling Time, Harsh Curv...	No
energyreport	Vehicle	Total consumption used, Total CHG used, Total State of Charge used, Total energy used, Consumption, ...	No

- To use a shared customized report, open the menu for the report and select “Use”:




The report will now be available under “Customized Reports” in the main menu:



## My Customized Reports: Create a Customized Report

Creating a customized report is a simple process:

1. In the My Customized Reports view, click on the  button under the My Customized Reports header. An “Add Customized Report” box will show.

Add Customized Report

Name \*

Source \*

Vehicle

Selected Columns

Select active columns in report

☐ Total AdBlue

☐ AdBlue

☐ Total Diesel Engi...

☐ Total Driven Dista...

☐ Distance

☐ Doors Opened

☐ Alcolock

☐ ABS

☐ Brake Activations

☐ Excessive Idling ...

☐ Harsh Acceleration

☐ Harsh Braking

☐ Harsh Curving

☐ Overtaking

☐ Total consumptio...

☐ Consumption

☐ Stops

☐ Stops w/ ado

☐ Stops w/o ado

☐ Total Engine Hours

☐ Time

☐ Total idling time

☐ Electrical time

☐ Diesel time

☐ Time radio mode

☐ CO<sub>2</sub>

☐ CO

☐ NO<sub>x</sub>

☐ THC

☐ PM<sub>10</sub>

☐ CO<sub>2</sub>/km

☐ CO/km

☐ NO<sub>x</sub>/km

☐ THC/km

☐ PM<sub>10</sub>/km

☐ Total CNG used

☐ CNG

☐ Total State of Cha...

☐ State of Charge

☐ Total energy used

☐ Energy

Column sorting

Drag columns to display in the desired order

☐ Shared

X Cancel

✓ Save

2. Click in the Name field (or press Tab) and enter a name for your report.

Add Customized Report

Name \*

Rons Entob livs

Source \*

Vehicle

Selected Columns

Select active columns in report

☐ Total AdBlue

☐ AdBlue

☐ Total Diesel Engi...

☐ Total Driven Dista...

☐ Distance

☐ Doors Opened

☐ Alcolock

☐ ABS

☐ Brake Activations

☐ Excessive Idling ...

☐ Harsh Acceleration

☐ Harsh Braking

☐ Harsh Curving

☐ Overtaking

☐ Total consumptio...

☐ Consumption

☐ Stops

☐ Stops w/ ado

☐ Stops w/o ado

☐ Total Engine Hours

☒ Time

☐ Total idling time

☒ Electrical time

☐ Diesel time

☐ Time radio mode

☐ CO<sub>2</sub>

☐ CO

☐ NO<sub>x</sub>

☐ THC

☐ PM<sub>10</sub>

☐ CO<sub>2</sub>/km

☐ CO/km

☐ NO<sub>x</sub>/km

☐ THC/km

☐ PM<sub>10</sub>/km

☐ Total CNG used

☐ CNG

☒ Total State of Cha...

☒ State of Charge

☒ Total energy used

☒ Energy

Column sorting

Drag columns to display in the desired order

Time

Electrical time

Total State of Charge used (%)

State of Charge (%)

Total energy used [kWh]

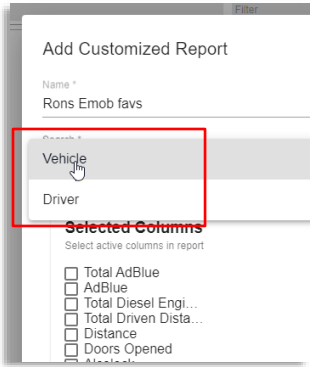
Energy [kWh]

☒ Shared

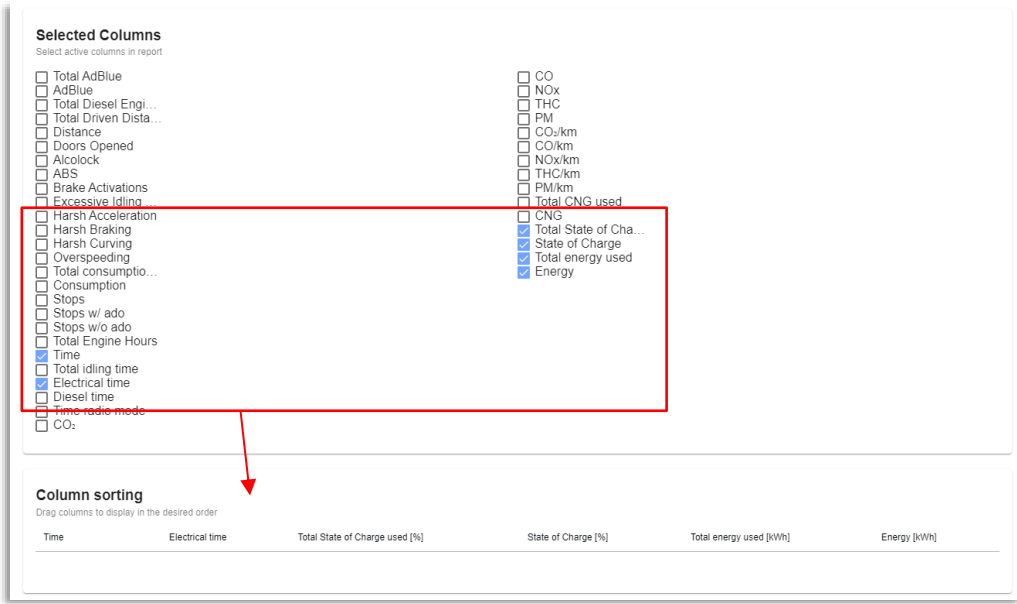
X Cancel

✓ Save

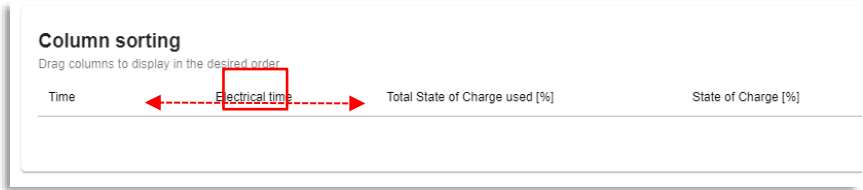
3. In the Search menu, select the search type: Vehicles or Drivers



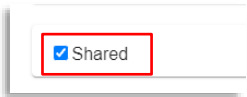
4. In the Columns signals list, checkboxes to include signals (columns) in the report. As you check boxes in the menu, those columns are added to the “dummy” report header section below.



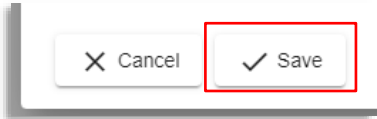
5. Sort the order that the [selected] signals are to be presented in (the column order) by dragging column headers to the left/right in the header section.



6. If you want to share your new customized report with other users in your company, check the “Shared” box.



7. Save your new customized report by clicking on the Save button.



My Customized Reports: Edit a Customized Report

When you select Edit in the Customized Reports row menu, the menu section presented when you created the report will open (With an “Edit” header.)

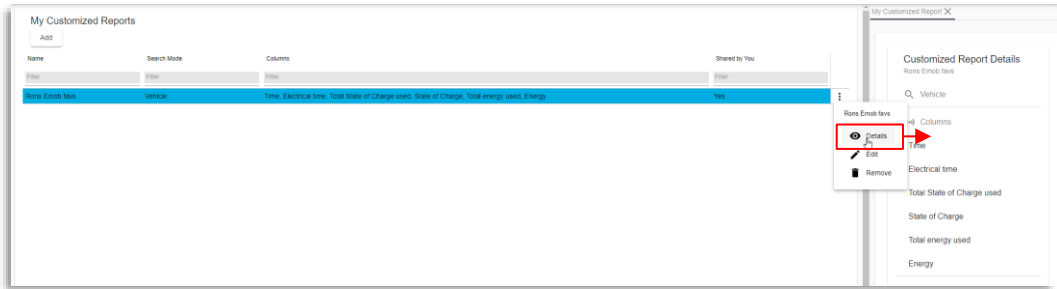
Here you can change the customized report name, and search type, add/remove columns (signals) and drag headers to change the order, just like when you create a report. Click Save to save your changes.

A screenshot of the 'Edit Customized Report' interface. The title bar says 'test 1'. Below it is a menu with 'Details', 'Edit' (highlighted with a red dot and arrow), and 'Remove'. The main area is titled 'Edit Customized Report' and contains several sections: 'Report name' with the text 'Rons Emob favs' (boxed); 'Search type' with a dropdown menu showing 'Vehicle' (boxed); 'Selected Columns' with two columns of checkboxes. The right column has 'Total State of Charge used [%]' checked (boxed); 'Column sorting' with a table of headers: 'Time', 'Electrical time', 'Total State of Charge used [%]', 'State of Charge [%]' (boxed), 'Total energy used (kWh)', and 'Energy (kWh)'. A red dashed arrow points from the 'State of Charge [%]' header to the right; 'Shared' checkbox is checked (boxed); and 'Cancel' and 'Save' buttons are at the bottom, with 'Save' boxed. Red arrows point from text annotations to these elements: 'Change the report name' to the report name field; 'Open the search type menu (switch between vehicle and driver search)' to the search type dropdown; 'Check/un-check to add/remove signals from the report' to the 'Total State of Charge used [%]' checkbox; 'Click and drag header to change column order' to the 'State of Charge [%]' header; 'Click Save to save your changes.' to the 'Save' button; and 'Tick box to share with other users in your company.' to the 'Shared' checkbox.



## My Customized Reports: Customized Report Details

To get a quick overview of the signals (columns) included in a customized report in the list, select the Details menu item in the row menu:



# 7 Info Management

## 7.1 Info[rmation] Management

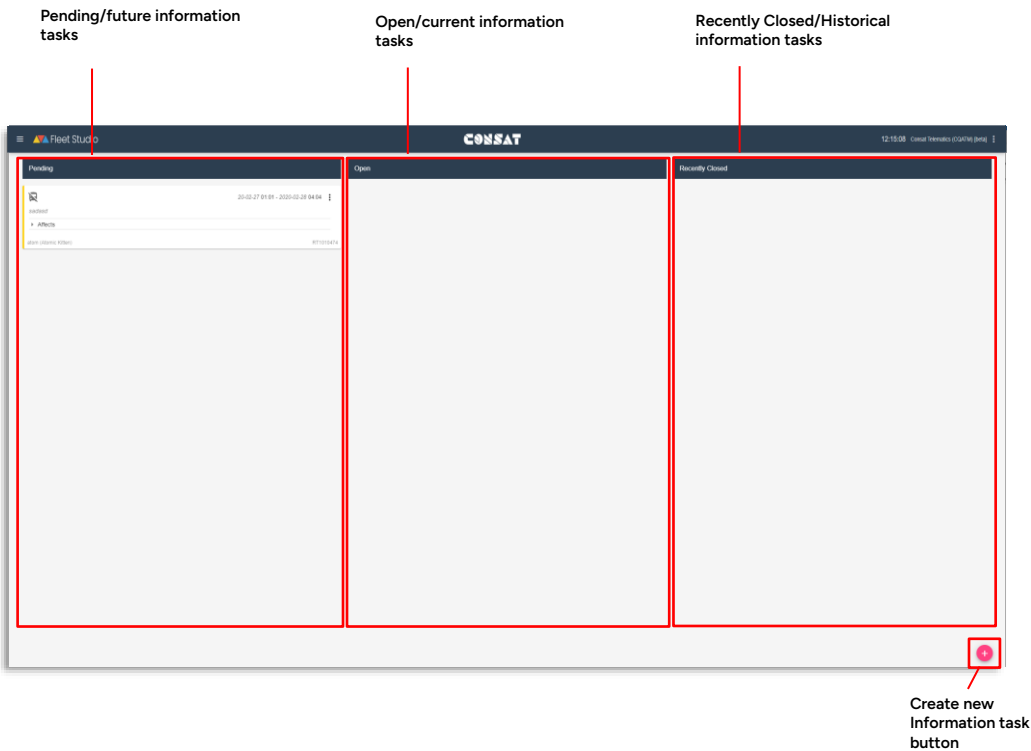
- Customer/user-dependent function

Information Management is a simplified “companion” to the Consat Traffic Studio New Traffic Information and Traffic Tasks tools. With this tool, you can view, create and delete traffic information tasks (with limited content) without using Traffic Studio.

### Overview/Main View

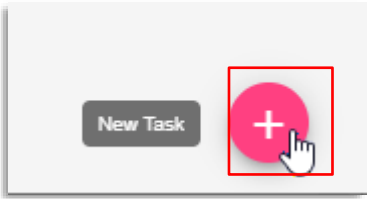
The main view of the Information Management “tool” has three main sections, showing future (**Pending**), Currently active (**Open**) and Recently active/Historical (**Recently Closed**) information tasks.

**Note:** The Recently Closed section will list both tasks that are no longer active (whose active period has lapsed) and tasks that have been deleted.

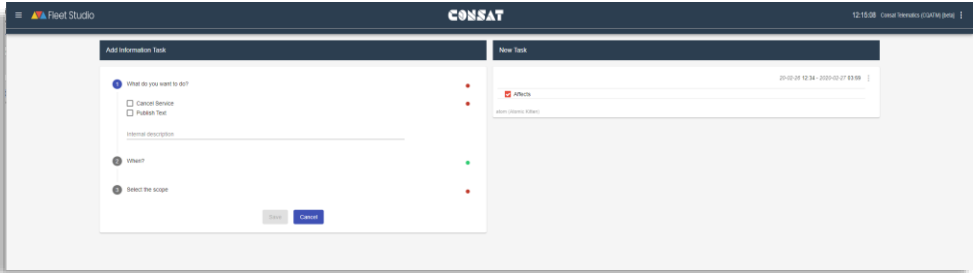


Workflow: Create/Edit Information Task

- 1. Click/touch the New [Information] Task button.



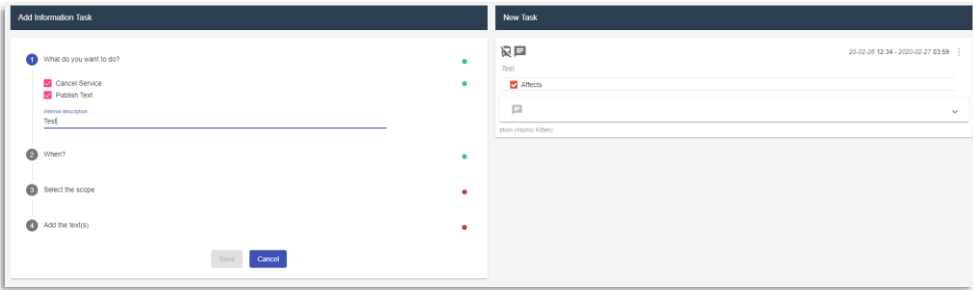
- 2. Two sections open: **Add Information Task** and **New Task**. You will enter content in the left section and view the filled-in Task in the New Task section to the right.



- 3. Fill in the Add Information Task section from top to bottom (The New task section to the right will be filled in as you complete the task sub-sections to the left.). The workflow is almost self-explanatory.

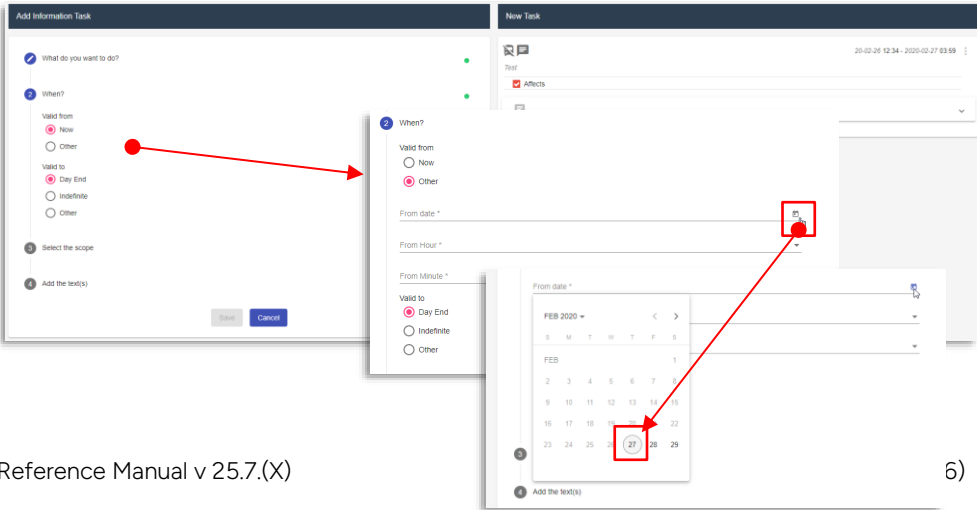
Click on/touch each section text to expand that section.

- 4. What to do: Cancel Service/Publish Text

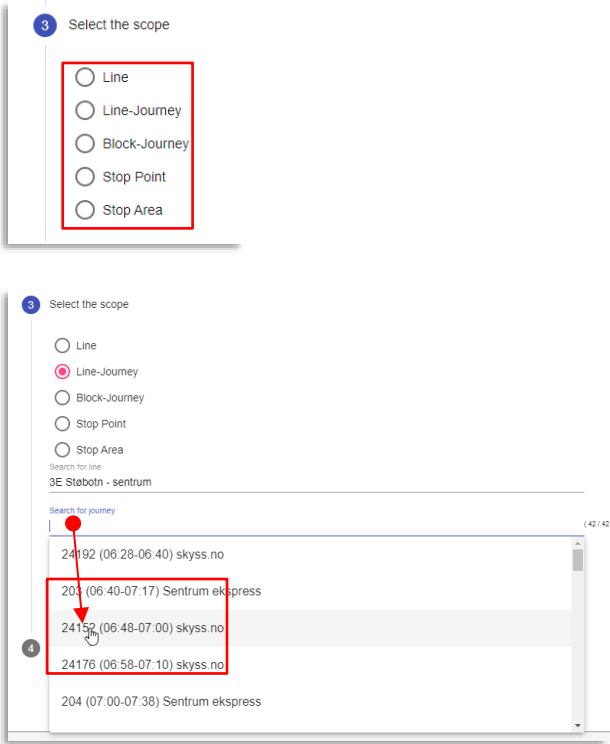


- 5. Add Internal [task] description text

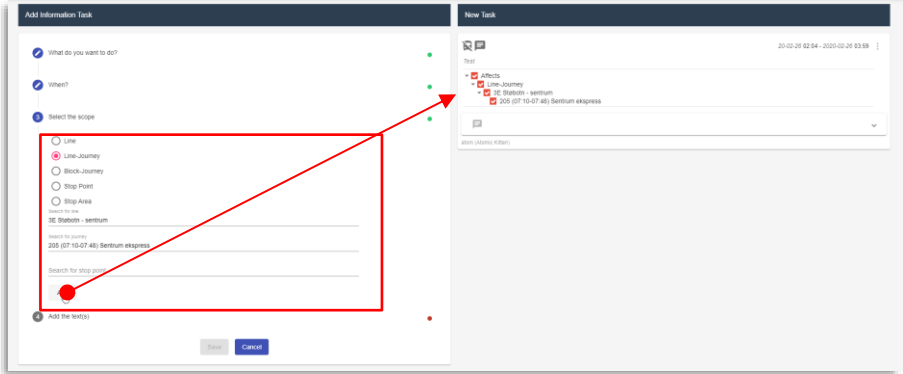
- 6. **Select time-period.** Select Other for specific from/to times. Date, hour, and minute are entered in separate sections. (Calendar available for date selection– click/touch the calendar symbol.)



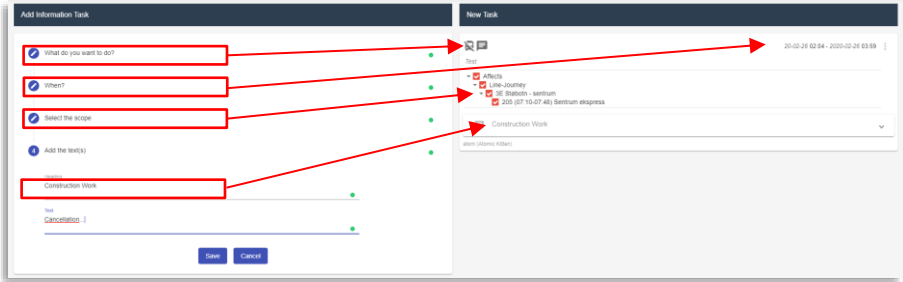
7. **Select the scope:** What traffic data nodes will be affected by the task: First, what traffic data nodes to select and then enter content in the following search section(s). Each section auto-completes showing all traffic data nodes you can select. Click/touch to select.



8. **Click on Add to add the selection** (displayed in a node tree in the New Task section, see below). Repeat to add "any" number of nodes, of any type.

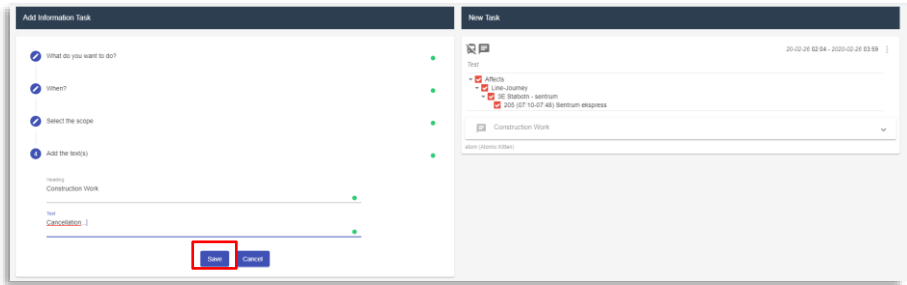


9. If you selected Publish Text in the first section, now enter a Header and an information text to be published.



**Note:** Publication channels (at-stop displays, web API:s, etc.) are configured outside the application but displayed in the New Task section

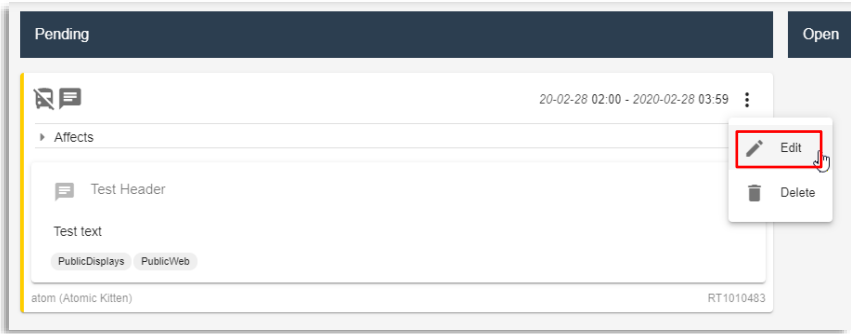
- 10. Click on/touch **Save** to create the new information task. The two sections will close. You return to the main view (see the previous manual section).



Editing Pending (future) or Open (current) Information Tasks

To edit an information task, click on/touch the menu symbol in the top right corner of the task section and select Edit in the menu.

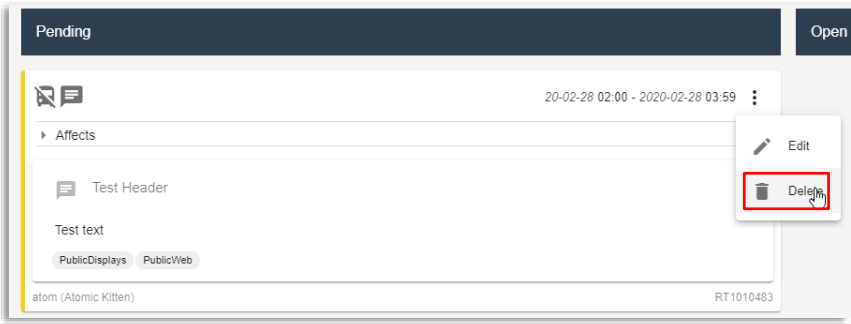
See the previous “Create Information task” workflow description – entering a task is identical to creating one. The only difference is you only have to enter the details you need to change.



Deleting Pending (future) or Open (current) Information Tasks

To delete an information task, click on/touch the menu symbol in the top right corner of the task section and select Delete in the menu.

The information task moves to the “Recently Closed” section in the main view.



# 8 Charging Management

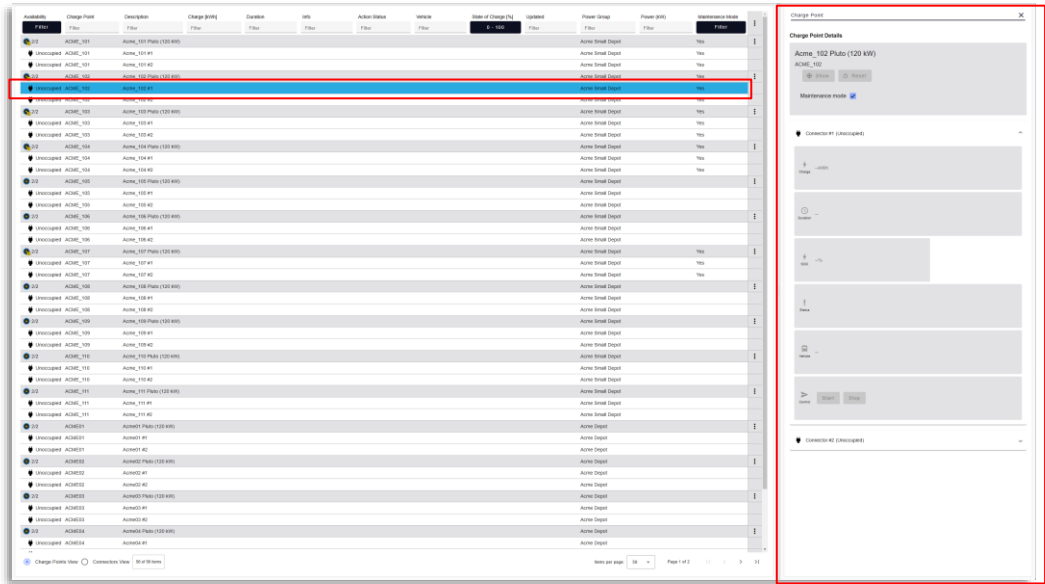
The tools/views in this section handle electric vehicle charging.

## 8.1 Charge Points

The Charge Points view provides basic information and real-time status (connected vehicles, charging status, SoC...) for the charge points in your system.

- Charge points (chargers) can be remotely started, stopped, and reset (hard reset/reboots and soft reset available).
- Charge Points can be set to Maintenance Mode to indicate maintenance.

### Overview

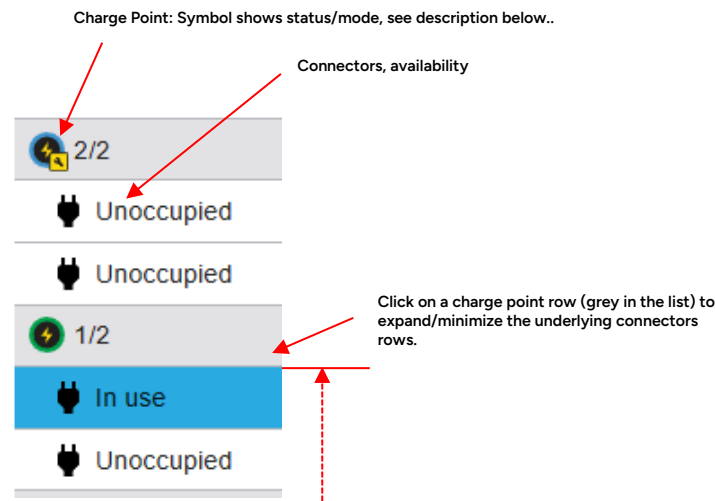


Charge points/connectors presented in hierarchical list/connector list.

Details section for charge point – accessed through the charge point list menu, see following section.

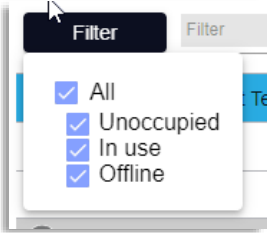
## Hierarchical List: Charge Points and Connectors


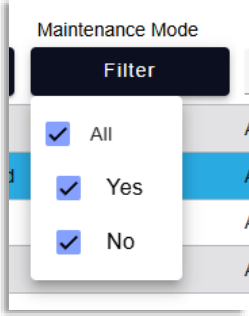
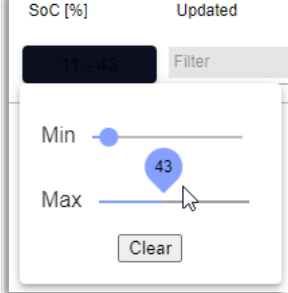
With the list presentation set to Charge Points (see below) all connectors are grouped by charge point.



## Main List Description

- Note:** The previous sessions' data/messages are displayed but greyed out in the list.

Header	Description
Availability	<p>Current availability status of the Charge Point/connector. Note that a charge point with several connectors can be in use but still have available connectors.</p> 

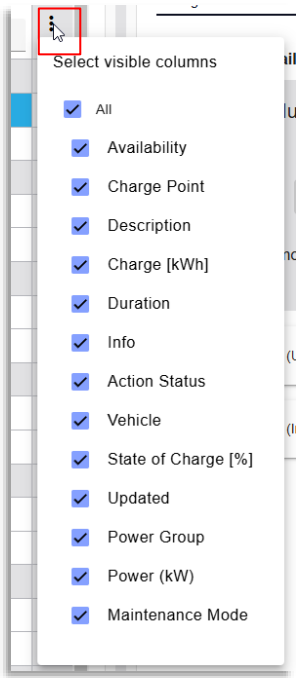
Header	Description
Maintenance Mode	<p>If charger is set to Maintenance Mode. Symbol indicates maintenance mode. Filter available:</p> <div> Symbol indicates Maintenance Mode</div> <div></div> <p><b>Note:</b> Set maintenance mode in details section, see below. When in maintenance mode, the charger is excluded from Consat Smart Charging load limitation/power balancing/allocation, allowing all other chargers to share the available power.</p> <p>It is still possible to use a charger in maintenance mode for testing purposes, etc. Make sure that the maximum power for the group is not exceeded.</p>
Charge Point	Operators Charge Point ID
Description	Operators charge point/connector name
Charge [kWh]	Transferred energy
Duration	(Current) duration of the charging session
Info	Notification/status messages from the charge point.
Action Status	Control commands, response
Vehicle	Connected/charging vehicle. Note: Vehicle charger ID displayed if data is not available for mapping charger to vehicle.
State of Charge [%]	<p>Connected vehicle current SoC (state of charge). Set range filter to only view vehicles within set SoC range.</p> <div></div>
Updated	Timestamp showing when the information was last updated.
Power Group	Name of power group charger belongs to, if any.



Header	Description
Power	Current charging power, updated about every minute.

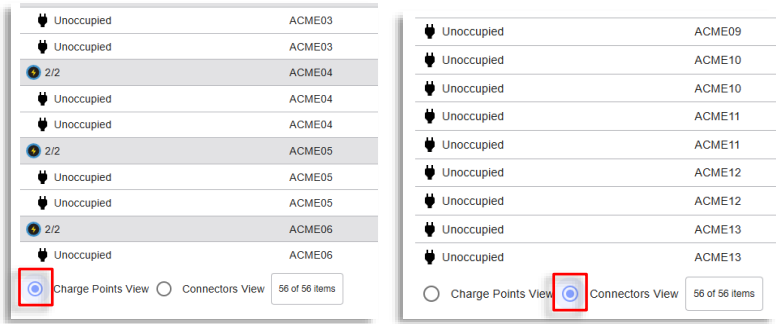
Configure Visible Columns

Right-click on the “...” menu button to the right in the header section to open the “Select Visible Columns” menu. Here you can check/uncheck boxes to include or exclude columns in the list presentation, to suit your specific needs.



Presentation: Charge Points View/Connectors View

Clock to view connectors per charge point or “ungrouped”:



Details

The details view, accessed through the row menu, shows charger information and connector details. A configuration log shows maintenance mode changes.

Charge Point

Charge Point Details

Acme\_105 Pluto (120 kW)

ACME\_105

13:13:07

Show

Reset

Maintenance mode ☐

Connector #1 (In use)

Connector #2 (Unoccupied)

Charge

--kWh

Duration

--

SOC

--%

Status

Faulted. No error.

Vehicle

--

Control

Start

Stop

Configuration Logs

Maintenance mode deactivated

2025-02-10 14:58:29 - consat

Maintenance mode activated

2025-02-10 14:53:09 - consat

Maintenance mode deactivated

2024-11-12 15:19:08 - consat

Maintenance mode activated

2024-11-12 15:17:27 - consat

Charger information, view on map button, charger reset button.

Check "Maintenance mode" to set the charger to maintenance mode, see list description above.

Connector #1 (In use)

Charge

2.00kWh

Duration

02:34:52

SOC

20.0%

Status

Charging. No error.

Vehicle

1000000039

Control

Start

Stop

Connector information (unoccupied, in use, right). Includes charger controls: Start, Stop Charging.

Configuration log. Currently Maintenance mode changes: Activation/deactivation, timestamp, user

## 8.2 Invalid Authorizations

This simple view lists **the last 15 attempts to connect to a charger that resulted in an “Invalid” state**, i.e. the vehicle was not okayed/authorized to charge at the station.

Only vehicles (buses) included in the CTS system, and vehicles specifically authorized are allowed to charge. All other vehicles connected to a CTS managed charger will result in an “invalid” status when connected, and will be listed in this view.

**Note:** The row menu in this view provides direct access to an “Authorize Vehicle” function. The most convenient way of authorizing a vehicle, if you are not sure of its ID tag, is to connect it to a charger, check the Invalid Authorizations list and authorize the vehicle that way (see the description below). The next time you connect your vehicle it will be authorized to charge.

### Overview

- Note:** The list is capped to show only the last 15 attempts resulting in invalid charging status. It includes information about the connected vehicle (ID tag) and the charger and connector used, plus when the connection/attempt was made.

Invalid Authorizations

Id Tag	Charge Point	Connector	Timestamp	
Filter	Filter	Filter	Filter	
1000000052	ACME_111	2	2024-05-14 09:59:15	⋮
1000000051	ACME_111	1	2024-05-14 09:59:15	⋮
1000000050	ACME_110	2	2024-05-14 09:59:15	⋮
1000000049	ACME_110	1	2024-05-14 09:59:15	⋮
1000000032	ACME_101	2	2024-05-14 09:59:14	⋮
1000000034	ACME_102	2	2024-05-14 09:59:14	⋮
1000000038	ACME_104	2	2024-05-14 09:59:14	⋮
1000000042	ACME_106	2	2024-05-14 09:59:14	⋮
1000000048	ACME_109	2	2024-05-14 09:59:14	⋮
1000000044	ACME_107	2	2024-05-14 09:59:14	⋮
1000000046	ACME_108	2	2024-05-14 09:59:14	⋮
1000000040	ACME_105	2	2024-05-14 09:59:14	⋮
1000000036	ACME_103	2	2024-05-14 09:59:14	⋮
1000000035	ACME_103	1	2024-05-14 09:59:14	⋮
1000000031	ACME_101	1	2024-05-14 09:59:14	⋮

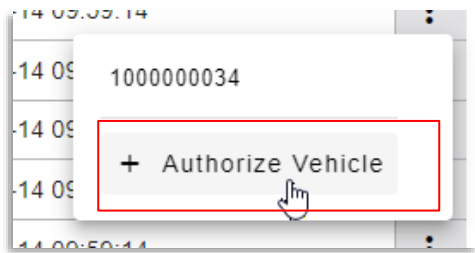
Items per page: 25 Page 1 of 1

List Description

Header	Description
Id Tag	The "vehicle charge ID".
Charge Point	The charger
Connector	The connector of the charger
Timestamp	When the (unsuccessful) charging attempt was made.

Authorize a Vehicle in the list

1. In the row menu: Select "Authorize Vehicle".



2. In the dialogue: Enter a suitable description of your vehicle.

A screenshot of the 'Authorize Vehicle' dialog box. It contains two input fields: 'Id Tag\*' with the value '1000000034' and 'Description\*' with the value 'Boss Plaid'. The 'Description\*' field is highlighted with a red rectangular box. Below the input fields is an information icon and the text 'Authorization takes effect once the vehicle is reconnected'. At the bottom are 'Cancel' and 'Create' buttons.

3. Click Create to authorize the vehicle. It will be removed from the Invalid list. The next time it is connected to one of your chargers, it will be authorized to charge.

A screenshot of the 'Authorize Vehicle' dialog box, identical to the previous one. However, the 'Create' button at the bottom right is now highlighted with a red rectangular box, indicating it should be clicked.

### 8.3 Authorized Vehicles

This view shows all vehicles (outside the electrical buses in the CTS system that, of course, are authorized) that are authorized to charge at the station.

You can freely add or remove vehicles from the list.

- Note:** The row menu in the Invalid Authorizations view provides direct access to an “Authorize Vehicle” function. The most convenient way of authorizing a vehicle, if you are not sure of its ID tag, is to connect it to a charger, check the Invalid Authorizations list and authorize the vehicle that way (see the description on the previous page). It will immediately be included in the Authorized Vehicles list.

The next time you connect your vehicle it will be authorized to charge.

#### Overview

The simple list includes all vehicles (identified by their charger ID tag), outside the electrical buses in your system, that are currently authorized to use the chargers.

Authorized Vehicles

Id Tag	Description	Updated	
Filter	Filter	Filter	
test_id_demo	test_id_demo	2024-05-08 10:16:00	⋮
test_id2	Are we dropping ids?	2024-05-06 09:48:52	⋮
test_id3	test_id3	2024-05-08 10:15:51	⋮
test-id	test-update	2024-05-07 14:11:21	⋮

Items per page: 25 Page 1 of 1

+ Add Authorized Vehicle

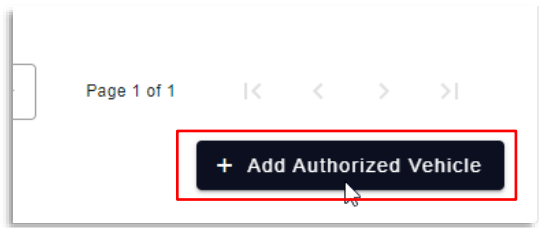
Add Vehicle to the Authorized List.  
(ID tag required for identification. See tip above for quick authorization of an unauthorized vehicle.)

#### List Description

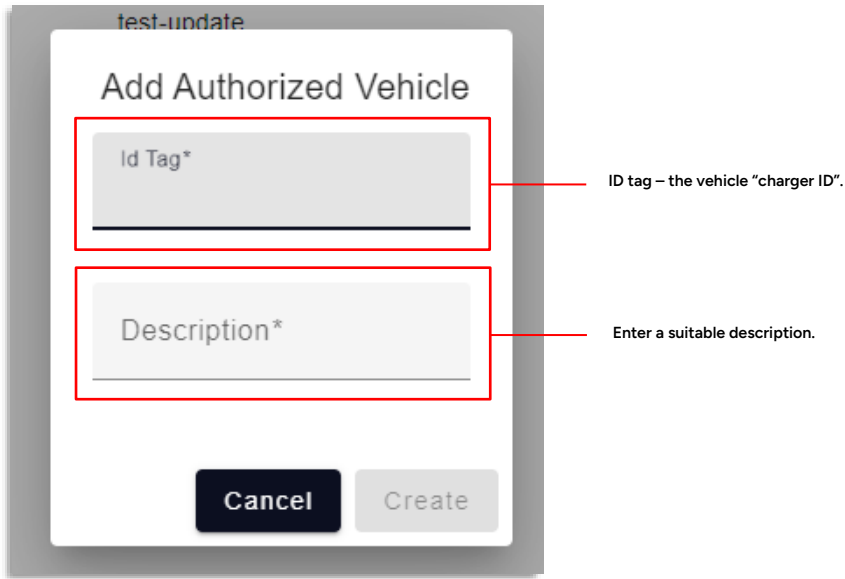
Header	Description
Id Tag	The “vehicle charge ID”.
Description	A free text description/name for the vehicle – for instance vehicle model and reg.
Updated	When the vehicle was authorized.

## Authorize Vehicle

1. Click on "Add Authorized Vehicle"



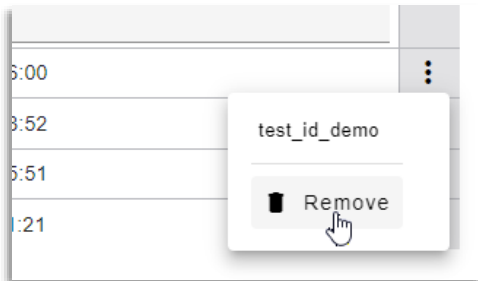
2. In the dialog: Enter the ID tag (see tip above for getting the ID tag of your vehicle), and a suitable description for human identification.



3. Click Create to add the vehicle to the list of vehicles authorized to use the chargers.

## Remove Vehicle from Authorized List

In the row menu, select Remove. The vehicle will immediately be removed from the list. No confirmation dialogues.



## 8.4 Power Groups

Power Groups manages groups of chargers with a specific max power (fusing current) limiting the groups’ total charging power/current.

Power groups can also have “Power Profiles” (see the next chapter) applied, allowing varying max power during different periods.

Individual chargers/connectors in a power group can be assigned power according to a specific “strategy”. CTS offers two basic strategies: APS, Adaptive Power Sharing, and APC, Adaptive Priority Charging. With APS, the available power in the power group is divided equally among all. currently charging vehicles. With APC vehicles get varying priority depending on ether charger cocation or their assignment status/assignment needs.

APC is a potentially very complex function. For description, see the Charging Strategies chapyer in the Traffic Studio reference manual.

With no charging strategy the chargers are not controlled by CTS (any power group max power have no effect). The power group is only an administrative grouping of the chargers.

Power Groups

Id	Name	Description	Max Power Available [W]	Strategy	Power Profile	Updated	
Filter	Filter	Filter	Filter	Filter	Filter	Filter	
1	Acme Depot	The Acme Depot	670000	SmartCharging	PP-1	2023-10-02 02:00:00	⋮
2	Acme Small Depot	The Acme Small Depot	680000	None		2024-01-01 01:00:00	⋮

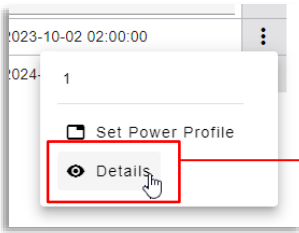
### List Description

Header	Description
Id	The Power Group ID
Name	The Power Group name
Description	The Power Group description
Max Power Available [W]	<p>The maximum power available to the chargers in the power group. <b>Note that when you have a power profile applied this may limit the max power for specific periods defined in the profile.</b></p> <p><b>Note:</b> With no charging strategy (“none” displayed in the Strategy column), any max power available setting wil have no effect. The charger power will not be controlled by CTS.</p>

Header	Description
Strategy	<p>How/if power is allocated to the chargers in the group (max power defined by the power group setting):</p> <p><b>APS, Adaptive Power Sharing:</b> A simple load balancing function dividing the available group power equally among all charging vehicles.</p> <p><b>APC, Adaptive Priority Charging:</b> The charging vehicles will be prioritised depending on either charger/connector position or the vehicles assignment (needs). See the TS Reference manual for description of this complex function.</p> <p><b>None:</b> CTS does not control the charger power.</p>
Power Profile	<p>If a power profile is applied, the name of the profile is displayed here.</p>
Updated	<p>When the power group was last changed/updated.</p>



Details



Select Details in the row menu to open the details window tab. See below.

Acme Depot

The Acme Depot

2023-10-02 02:00:00

Max Power Available: 670kW

Power Profile: PP-abf

Time	Power
00:00 - 06:30	100kW
06:30 - 12:30	200kW
12:30 - 18:00	300kW
18:00 - 24:00	400kW

Charge Points:

Id	Description
ACME01	Acme01 Pluto (120 kW)
ACME02	Acme02 Pluto (120 kW)
ACME03	Acme03 Pluto (120 kW)
ACME04	Acme04 Pluto (120 kW)
ACME05	Acme05 Pluto (120 kW)
ACME06	Acme06 Pluto (120 kW)
ACME07	Acme07 Pluto (120 kW)
ACME08	Acme08 Pluto (120 kW)
ACME09	Acme09 Pluto (120 kW)
ACME10	Acme10 Pluto (120 kW)
ACME11	Acme11 Pluto (120 kW)
ACME12	Acme12 Pluto (120 kW)
ACME13	Acme13 Pluto (120 kW)
ACME14	Acme14 Pluto (120 kW)
ACME15	Acme15 Pluto (120 kW)

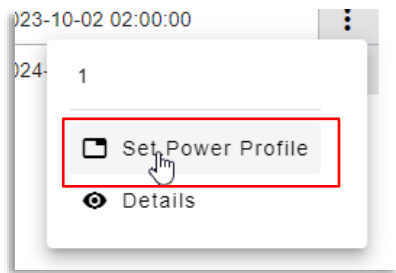
Group Name, last change timestamp, power group max power

Power profile (if applied). Periods, graph showing power over time (24h).

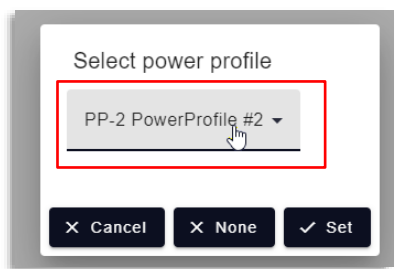
The charge points in the power group (ID, Description)

## Apply a Power Profile to a Power Group

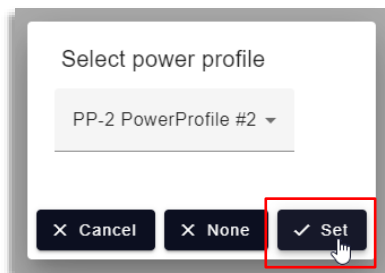
- 1. Select "Set Power Profile" in the row menu



- 2. Select power profile in the dialogue menu

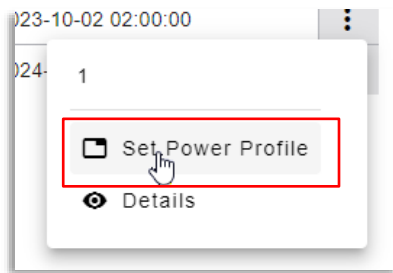


- 3. Click on Set to apply the power profile.

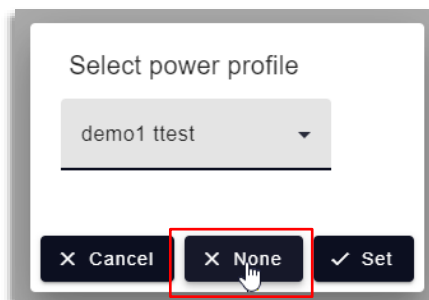


## Remove a Power profile from a Power Group

1. Select "Set Power Profile" in the row menu



2. Click on "None" in the dialogue. The power profile will be removed from the group immediately.



## 8.5 Power Profiles

“Power Profiles” allow you to control the total charging power of a power group during different periods. Use it to limit the power to limit power consumption during high price periods or for load balancing, etc.

**Note:** This function is under development.

**Note:** Power profiles are used to configure power groups, they are not meant to be interactive tools. The Consat charging sub system need to be rebooted for the profiles to take effect, a process separated from the Fleet Studio application. Take this into consideration when checking the effects of your applied power profiles.

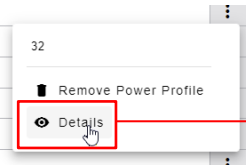
Power Profiles				
Id	Name	Description	Updated	
Filter	Filter	Filter	Filter	
1	PP-1	PowerProfile #1	2024-04-27 13:59:21	⋮
2	PP-2	PowerProfile #2	2024-04-27 13:59:21	⋮
25	PP-ba2	Auto PowerProfile	2024-04-30 01:51:29	⋮
31	PP-f70	Auto PowerProfile	2024-05-07 12:45:11	⋮
32	PP-3a0	Auto PowerProfile	2024-05-07 13:12:29	⋮
33	PP-daa	Auto PowerProfile	2024-05-07 13:12:30	⋮
37	PP-1ca	Auto PowerProfile	2024-05-08 10:20:25	⋮
38	PP-abf	Auto PowerProfile	2024-05-14 08:29:04	⋮
40	weqdtwe	asdefwesd	2024-05-28 16:58:40	⋮

### List Description

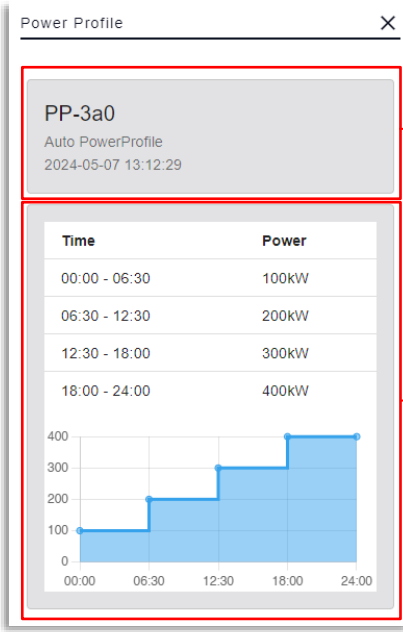
Header	Description
Id	The Power Group ID
Name	The Power Profile name (entered when the profile was created/last changed).
Description	The Power Profile description (entered when the profile was created/last changed).
Updated	When the power group was last changed/updated.

## Details

The details section shows the power profile periods numerically and graphically.



Select Details in the row menu to open the details window tab. See below.

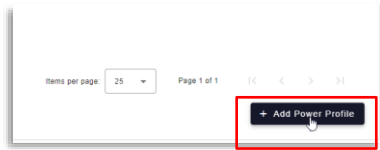


Power Profile name, description, last changed timestamp

Power Periods: Numerical list view, graph (power levels over 24h period)

## Create a Power Profile

1. Click on the Add Power Profile button in the bottom right corner of the view.



2. In the Dialogue, enter a suitable name and description.

A screenshot of a 'Add Power Profile' dialog box. The 'Name' field contains 'Profile 1' and the 'Description' field contains 'A splendid word, or two'. Both fields are highlighted with a red rectangular box. Below the text fields is a line graph with a y-axis from 0 to 1.0 and an x-axis from 00:00 to 24:00. Below the graph is a table with columns 'From Time', 'Until', and 'Power'. The first row shows '00:00', '24:00', and '0'. Below the table is a 'From time' section with 'HH' and 'MM' inputs, and a 'Power (kW)' input set to '0'. At the bottom are 'Cancel' and 'Add' buttons.

3. The default power period is 0W and stretches around the clock.  
**Add any number of periods by entering a start time in the "From time"-section, a power level in the Power section and then clicking the "+ Add power" button.**

A screenshot of the 'Add Power Profile' dialog box. The 'Name' field is 'Profile 1' and the 'Description' is 'A splendid word, or two'. The line graph now shows a blue shaded area from 04:00 to 24:00 at a power level of 500. The table below has two rows: the first row is '00:00' to '24:00' at power '0', and the second row is '04:00' to '24:00' at power '500'. The 'From time' section shows '04 : 00' and the 'Power (kW)' input is '500'. A red box highlights the 'From time' and 'Power (kW)' inputs, with a red arrow pointing to the '+ Set power' button. The 'Add' button at the bottom is also highlighted.

**Note:** Each power period sets the power level until the next period starts.

**Note:** Power periods are both displayed numerically in the list and graphically in the power profile graph, see above.

**Note:** You can change the power of a period in the list by selecting it and changing the power value and clicking the “set power” button, but you cannot change the from time. To change the “from time” you need to delete the period and create a new power period.

**Note:** Delete a period with the trash can delete button to the right on each row in the list, note that you cannot delete the default period, only change its power level or add more periods to make up your profile.

- 4. When the profile name, description and power periods are entered, click on the “Add” button in the dialogue to save the power profile.

Add Power Profile

Name \*  
Profile 1

Description \*  
A splendid word, or two

800  
600  
400  
200  
0

00:00 04:00 09:00 24:00

From Time	Until	Power	
00:00	04:00	0	
04:00	09:00	500	
09:00	24:00	900	

From time  
09 : 00

Power (kW)  
900

Edit a Power Profile

To edit a Power Profile, select “Edit” in the row menu. The profile settings will open.

Anton Test 4

Details

Edit

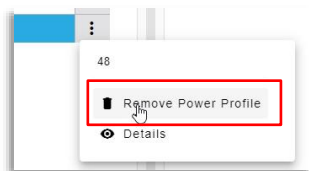
Remove

- See the “Create a Power Profile” chapter above for a description of the settings.

## Remove a power profile

To remove a power profile from the list, simply select “Remove Power Profile” in the row menu. The profile will be removed immediately (no confirmation dialogue).

- **Note:** You cannot remove a power profile in use by a power group.





## 8.6 Pull-Out Vehicles

The Pull-Out Vehicles View is a simple “one stop shop” for monitoring the flow of vehicles through the charging station: It lets you find a suitable connector for an arriving vehicle, then you can monitor the charging process and verify that the vehicle will finish charging in time for the next journey (and also check that the remaining range is sufficient for reaching its next planned charging session/window in the block).

All connectors (and connected vehicles) are presented in a simple list sorted by the vehicle charging status and the time to journey start for each vehicle.

- As the vehicles in the station charges and are getting closer to their planned next journeys (the pull-out journeys from the depot/charging station), they will move up the list.
- When the vehicles are disconnected and pulls out, the free connectors are moved to the bottom of the list showing that they are ready to receive “new” incoming vehicles.

With charging completed, the top vehicles leave the charging station. The now free connectors are moved to the bottom of the list.

### Vehicle flow in the list

The vehicle charging Process/flow runs from the bottom of the list to the top.

At the bottom you will find the free connectors awaiting vehicles.

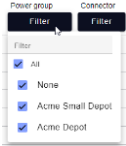
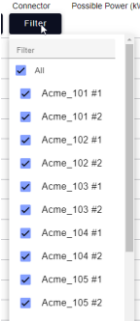
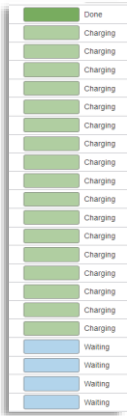
At the top, the vehicles that have finished charging are displayed.

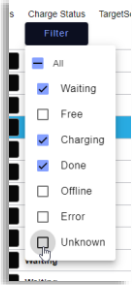
Vehicles arrive to the station and are connected to free connectors at the bottom of the list.

The connector/vehicle charging status is clearly indicated with color code and text. A filter can exclude states not of interest.

Pull-out Vehicles		Block	State of Charge (%)	Power group	Connector	Possible Power (kW)	Charge Status	Charge Status	Target SOC	Expected end time	Journey, start SOC	expected time at min SOC	Journey, start time	Minimum SOC until next charge	Power (kW)	Assigned power (kW)	Updated
Vehicle	Filter	Filter		Filter	Filter		Filter	Filter									
ACME-ZEB-03			40%	Acme Depot	Acme02 #1	120	Charging	97%	12:08:18	97%					60	120	10:03:47
ACME-ZEB-19			20%	Acme Depot	Acme01 #1	120	Charging	97%	12:09:18	84%					1	100	10:03:40
ACME-ZEB-16			40%	Acme Depot	Acme03 #1	60	Charging	97%	16:02:18	97%					60	60	10:03:47
ACME-ZEB-14			36%	Acme Depot	Acme07 #0	60	Charging	97%	16:17:18	97%					60	60	10:03:49
ACME-ZEB-06			32%	Acme Depot	Acme03 #0	60	Charging	97%	16:41:18	97%					60	60	10:03:43
ACME-ZEB-18			32%	Acme Depot	Acme09 #0	60	Charging	97%	16:41:18	97%					60	60	10:03:43
ACME-ZEB-10			29%	Acme Depot	Acme02 #0	60	Charging	97%	17:00:18	97%					60	60	10:03:37
ACME-ZEB-16			29%	Acme Depot	Acme02 #0	60	Charging	97%	17:00:18	97%					60	60	10:03:46
ACME-ZEB-08			26%	Acme Depot	Acme04 #0	60	Charging	97%	17:18:18	97%					60	60	10:03:40
ACME-ZEB-07			37%	Acme Depot	Acme04 #1	60	Charging	97%	19:12:18	97%					60	1	10:03:40
ACME-ZEB-11			33%	Acme Depot	Acme06 #1	60	Charging	97%	19:30:18	97%					60	1	10:03:35
ACME-ZEB-17			43%	Acme Depot	Acme09 #1	60	Charging	97%	19:30:18	97%					60	1	10:03:43
ACME-ZEB-01			42%	Acme Depot	Acme01 #1	120	Charging	97%	19:49:18	88%					60	1	10:03:50
ACME-ZEB-05			43%	Acme Depot	Acme03 #1	60	Charging	97%	20:31:18	100%					60	1	10:03:43
ACME-ZEB-09			40%	Acme Depot	Acme05 #1	60	Charging	97%	22:11:18	100%					60	1	10:03:38
ACME-ZEB-13			47%	Acme Depot	Acme07 #1	60	Charging	97%	22:20:18	100%					60	1	10:03:50
ACME-ZEB-27			47%	Acme Depot	Acme14 #1	60	Charging	97%	23:39:18	97%					60	1	10:03:47
ACME-ZEB-28			36%	Acme Depot	Acme14 #0	60	Charging	97%	23:57:18	97%					60	1	10:03:46
ACME-ZEB-12			22%	Acme Depot	Acme05 #0	60	Charging	97%	00:07:18	97%					60	1	10:03:34
ACME-ZEB-26			17%	Acme Depot	Acme13 #0	60	Charging	97%	01:37:18	97%					5	1	10:03:49
ACME-ZEB-30			17%	Acme Depot	Acme15 #0	60	Charging	97%	01:37:18	97%					5	1	10:03:43
ACME-ZEB-29			27%	Acme Depot	Acme13 #1	60	Charging	97%	02:01:18	100%					5	1	10:03:43
ACME-ZEB-25			27%	Acme Depot	Acme13 #1	60	Charging	97%	02:33:18	97%					5	1	10:03:50
ACME-ZEB-21			25%	Acme Depot	Acme11 #1	120	Waiting	97%	22:11:18	100%					1	1	10:03:38
ACME-ZEB-23			20%	Acme Depot	Acme12 #1	60	Waiting	97%	02:23:18	100%					1	1	10:03:35
ACME-ZEB-24			10%	Acme Depot	Acme12 #0	60	Waiting	97%	04:51:18	97%					1	1	10:03:34
					Z-01 #1	50	Free										
					Z-01 #2	50	Free										
					Z-02 #1	50	Free										
					Z-02 #2	50	Free										
				Acme Small Depot	Acme_101 #1	60	Free										08:00:13
1000000032			22%	Acme Small Depot	Acme_101 #2	60	Free								5		10:03:49
				Acme Small Depot	Acme_102 #1	60	Free										08:10:13
1000000034			22%	Acme Small Depot	Acme_102 #2	60	Free								5		10:03:46
				Acme Small Depot	Acme_103 #1	60	Free										08:20:12
				Acme Small Depot	Acme_103 #2	60	Free										08:20:12
				Acme Small Depot	Acme_104 #1	60	Free										08:30:12
				Acme Small Depot	Acme_104 #2	60	Free										08:30:13
1000000039			21%	Acme Small Depot	Acme_105 #1	60	Free								5		10:03:38
				Acme Small Depot	Acme_105 #2	60	Free										08:40:13
1000000041			21%	Acme Small Depot	Acme_106 #1	60	Free								5		10:03:35
				Acme Small Depot	Acme_106 #2	60	Free										08:50:13
				Acme Small Depot	Acme_107 #1	60	Free										09:00:12
				Acme Small Depot	Acme_107 #2	60	Free										09:00:13

List Description

Column Header	Description
Vehicle	Vehicle number
Block	Assigned block
State of Charge [%]	The connected vehicles current State of Charge (data from the charger).
Power Group	<p>The power group the connector is included in (see the previous chapter about power groups). Filter available:</p> 
Connector	<p>Charger connector description. Filter available:</p> 
Possible Power (kW)	The maximum power available for the connector, may depend on the number of vehicles connected to the charger.
Charge Status (colour)	<p>The connectors “charging process” status (colour code). Shows if a vehicle is connected or not and if it charges or has finished charging.</p> <p>Dark green= Vehicle has finished charging.</p> <p>Green = Vehicle is now charging.</p> <p>Blue = Vehicle is connected and awaits charging start (normally charging with minimum power, like 1kW)</p> <p>No colour = free connector/no vehicle connected, or charger offline</p> 

Column Header	Description
Charge Status	<p>Text showing status. Filter allows you to only include connectors with selected statuses in the list:</p> 
Target SoC	Planned charging level (at the start of the next [pull out] journey).
Expected End Time	When the charge window is expected to close. See the smart charging description below.
Journey Start SoC	Actual SoC at the start of the next journey. (If everything goes according to plan this is the same as the Target SoC, if not it will be less.).
Expected Time at min SoC	When the minimum SoC needed to reach the next planned charging session is reached. [time]
Journey Start Time	The planned start time of the next (pull-out) journey.
Minimum SoC Until Next Charge	The minimum SoC needed for the vehicle to be able to reach the next planned charging session in the assigned block.
Power (kW)	The current charging power. This may be lower than the assigned power if the vehicle does not accept the assigned charge power because of battery temperature, etc.
Assigned Power (kW)	The power assigned to the connector by the smart charging algorithm.
Updated	Timestamp showing when the presented data was last updated.

Details

Click on a row in the list to immediately open the (connector) details section, see below. Some information mirrors that in the list but you will also find **charger/connector specific information**. This is described below.

Charge	Power (kW)	Assign
60	120	
60	100	
60	60	
60	60	
60	60	
60	60	
60	60	
60	60	
60	60	

Charge Connector

Acme05 #2

ACME05

2024-08-16 12:38:08

Updated: 2024-08-16 12:38:08

Target SOC:

Actual SOC: 36

Expected SOC:

Expected end time:

Block:

Start:

Min Power: 1 kW

Max Power: 120 kW

Max Power Limit:

Default Power: 1 kW

Information mirroring the columns in the list. See description above.

Charger/connector specifications, see description below.

Charger/Connector-specific information in the details section

Header	Description
Min Power	Minimum charging power for the connector.
Max Power	Theoretical maximum charging power for the connector (may depend on other connector in use).
Max Power Limit	The maximum power <b>currently</b> assigned to the connector
Default Power	The charging power initially assigned to the connector when a vehicle is connected.

# 8.7 Transaction Report

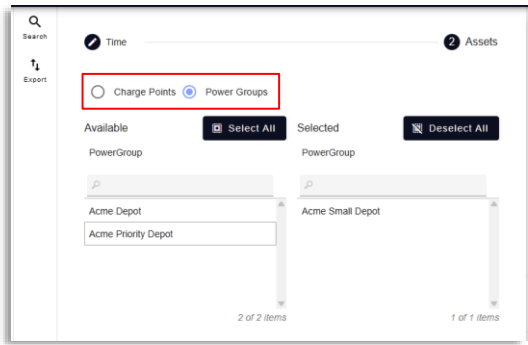
This report is mainly a troubleshooting tool: It lists all individual “transactions”/charging sessions logged in your system during the searched period.

Each transaction/charging session is presented in detail with a graphical presentation of SoC charger/connector Power Offered (what the charger offers the vehicle) and actual power (what the vehicle accepted/received) over time.

- Use the report to analyse the charging session you want to check in detail. SoC increase, transferred energy and why the charging session ended are presented accompanying the very informative graphical presentation.
- The Transaction report excel export is useful for further data analysis/presentation in other external applications.

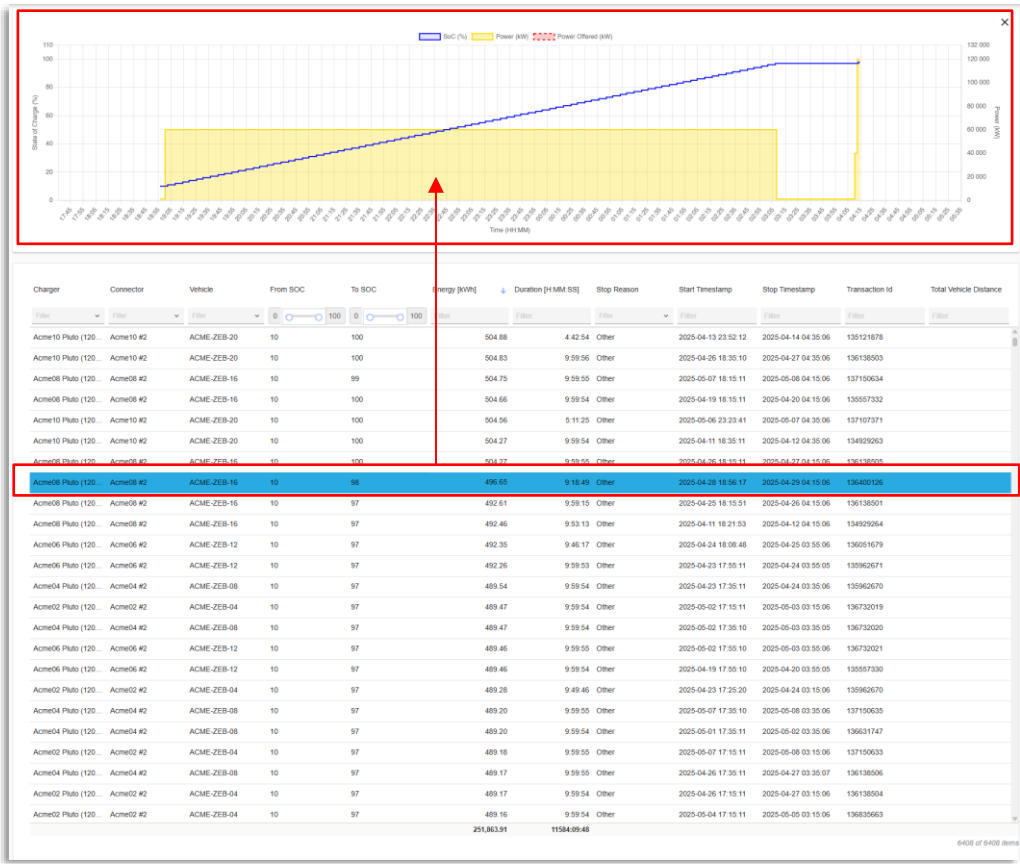
## Search

In the search section you select search **period** and the **Charge Points or Power Groups** (“assets”) that are to be included in the report.



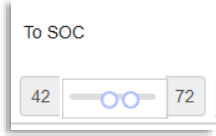
Overview

Select a session/transaction to view it graphically displayed over time in the top section. Tooltip the graphs to get detailed numerical values.



List Column Description

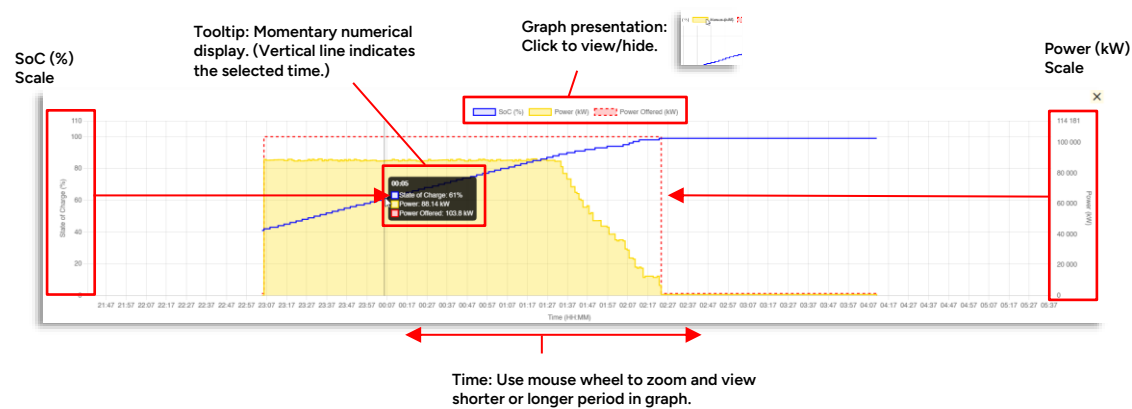
Header	Description
Connector ID	Connector used for transaction/session. Dropdown checkbox menu, all items.
Charger	Charger name Dropdown checkbox menu, all items.
Connector	"Connector Description". Customer dependent use. Can be used for corresponding parking area identification, etc.
Vehicle	Charging vehicle Dropdown checkbox menu, all items.
OCPP ID Tag	OCPP ID
From SoC	Vehicle start SoC. Range filter, band pass (drag points to set filter range): <div><div>From SOC</div><div><div>23</div><div></div><div>100</div></div></div>

Header	Description
To SoC	<p>Vehicle end SoC. Range filter, band pass (drag points to set filter range):</p> 
Energy [kWh]	Transferred energy
Duration [H:MM:SS]	Session duration
Stop Reason	<p>Why the session ended (Described in OCPP)</p> <p>Dropdown checkbox menu, all items.</p> <p><b>DeAuthorized</b> (authorization status)</p> <p><b>EmergencyStop</b> (emergency stop button pressed)</p> <p><b>EVDIsconnected</b> (charger cable disconnected)</p> <p><b>HardReset</b> (hard reset command received by charger)</p> <p><b>Local</b> (Stopped by user at charger)</p> <p><b>PowerLoss</b> (complete loss of power)</p> <p><b>Reboot</b> (locally initiated reboot of charger, like watchdog initiated)</p> <p><b>Remote</b> (remote stop request, normal stop request)</p> <p><b>SoftReset</b> (soft reset command was received by charger)</p> <p><b>UnlockCommand</b> (central system sent an unlock connector command)</p> <p><b>Other</b> (any other reason than described here)</p>
Start Timestamp	Date, time when session started
Stop Timestamp	Date, time when session ended
Transaction ID	Individual transaction ID number
Total Vehicle Distance	Vehicle odometer/total distance, if available.

Graph Description

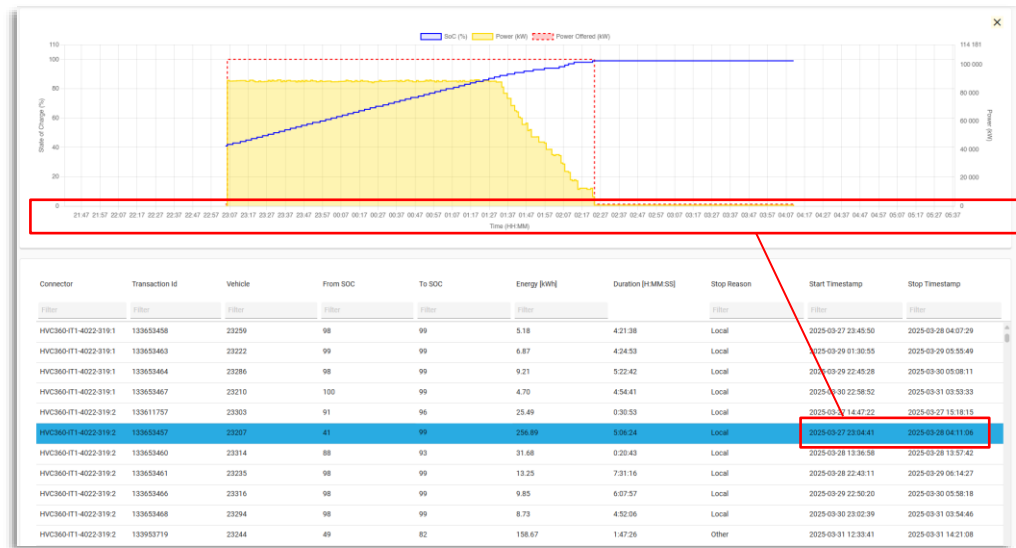
Select a row in the list to view the charging session in the graph above (you can also step up and down in the list to move your selection).

- The **vehicle SoC** over time is displayed as a blue line.
- The **Power Offered** to the vehicle by the charger over time is displayed as a dashed red line.
- The actual **Power** over time (what the vehicle receives/accepts) is presented as a yellow outline graph.



Time Presentation: Refer to list for date

The Start and Stop timestamps in the list shows which date and time the transactions/session occurred. The graph only presents the time. Refer to the list to check date.





## Sum Total Energy, Duration

Below the table, the sum total energy and duration for all listed transactions (see the number of items in the lower right corner to check how many they are) are displayed.

- **Tip:** Refine the search and use the filters to sum the energy and duration of a more specific set of transactions.

Energy (kWh)	Duration (H:MM:SS)	Stop Reason	Start Timestamp	Stop Timestamp	Transaction Id
Filter	Filter	Filter	Filter	Filter	Filter
			2025-04-16 08:05:10		135279153
			2025-04-16 10:24:10		135332601
			2025-04-16 10:35:11		135333262
			2025-04-16 13:24:23		135343403
1.49	1:29:40	Other	2025-04-16 13:35:24	2025-04-16 15:05:05	135344063
			2025-04-17 08:05:10		135399561
0.49	0:29:44	Other	2025-04-17 14:35:21	2025-04-17 15:05:06	135434062
7.00	6:59:55	Other	2025-04-18 08:05:11	2025-04-18 15:05:06	135464271
7.00	6:59:53	Other	2025-04-19 08:05:11	2025-04-19 15:05:05	135557330
			2025-04-20 08:05:10		135557331
5.24	5:14:29	Other	2025-04-20 09:50:36	2025-04-20 15:05:06	135676198
7.00	6:59:55	Other	2025-04-21 08:05:10	2025-04-21 15:05:05	135716366
			2025-04-22 08:05:11		135811951
			2025-04-22 11:50:42		135856193
			2025-04-16 08:15:10		135279153
			2025-04-16 10:24:10		135332601
			2025-04-16 10:35:11		135333262
			2025-04-16 13:24:23		135343403
1.66	1:39:41	Other	2025-04-16 13:35:24	2025-04-16 15:15:06	135344063
54,764.14	2541:49:58				

1361 of 1361 items

The sum total energy and duration of all listed transactions is displayed, under their respective columns.

## 8.8 Consat Smart Charging, a Short Description

**Note:** The smart charging functionality is based on traffic data currently not displayed in Fleet Studio. Use Traffic Studio to view the charging functionality "in proper context".

- Smart charging enables planned overnight and on-assignment opportunity charging of vehicles for optimal and adaptable use of the available chargers/charging capacity.
- Smart Charging can use both physical location of the chargers and the planned assignment of the charging vehicle to prioritise the charging vehicles. Chargers in a line may have higher priority chargers (leading to vehicles finish charging earlier) up front as not to block vehicles further back.
- Charging can also prioritise charging depending on the assignment of the vehicle charging.
- Smart Charging is a function enabled by the traffic data in use/the vehicle assignments: With no traffic data/assignment the charging is only controlled by the Power Groups load balancing/limiting-function.

With traffic data but no energy consumption information, the smart charging is limited to charging priority (see the description below).

With traffic data that includes energy and charge window start and end times, you get the full smart charging functionality described below.

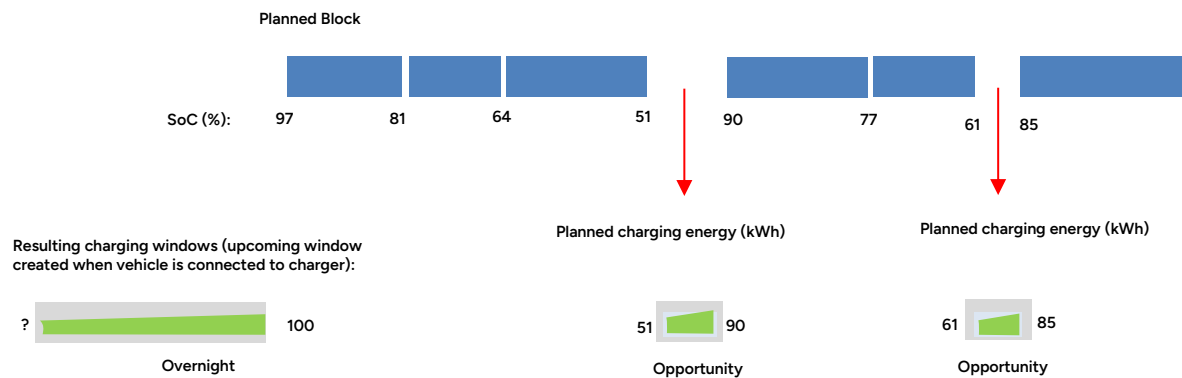
- Needed energy to be added to vehicles servicing blocks, between journeys, is included in the planned traffic.
- The smart charging function creates charging "windows" to cover the planned charging described in the planned traffic, and then dynamically matches the needs of assigned and connected vehicles with the available power in the chargers.
- Assigned vehicles get prioritised charging adapted to changing circumstances. A planned charging window can be adjusted on the fly for each connected vehicle to reach its target State of Charge (SoC), even if a vehicle arrives at the charger with unexpectedly low SoC.

## Smart Charging – From Traffic Data to Charging Windows

A key part of the smart charging function is the automatic creation of the smart charging windows, to fill the needs of all vehicles servicing the planned traffic. This function uses energy data included in the imported traffic data. (The traffic data includes planned charging energy for each charging period).

**Note:** This of course means that the planning system must base the energy data upon the real-world energy consumption of the vehicles that are to be assigned to each block, the Consat Smart charging function only has this data to work with so the information must be realistic.

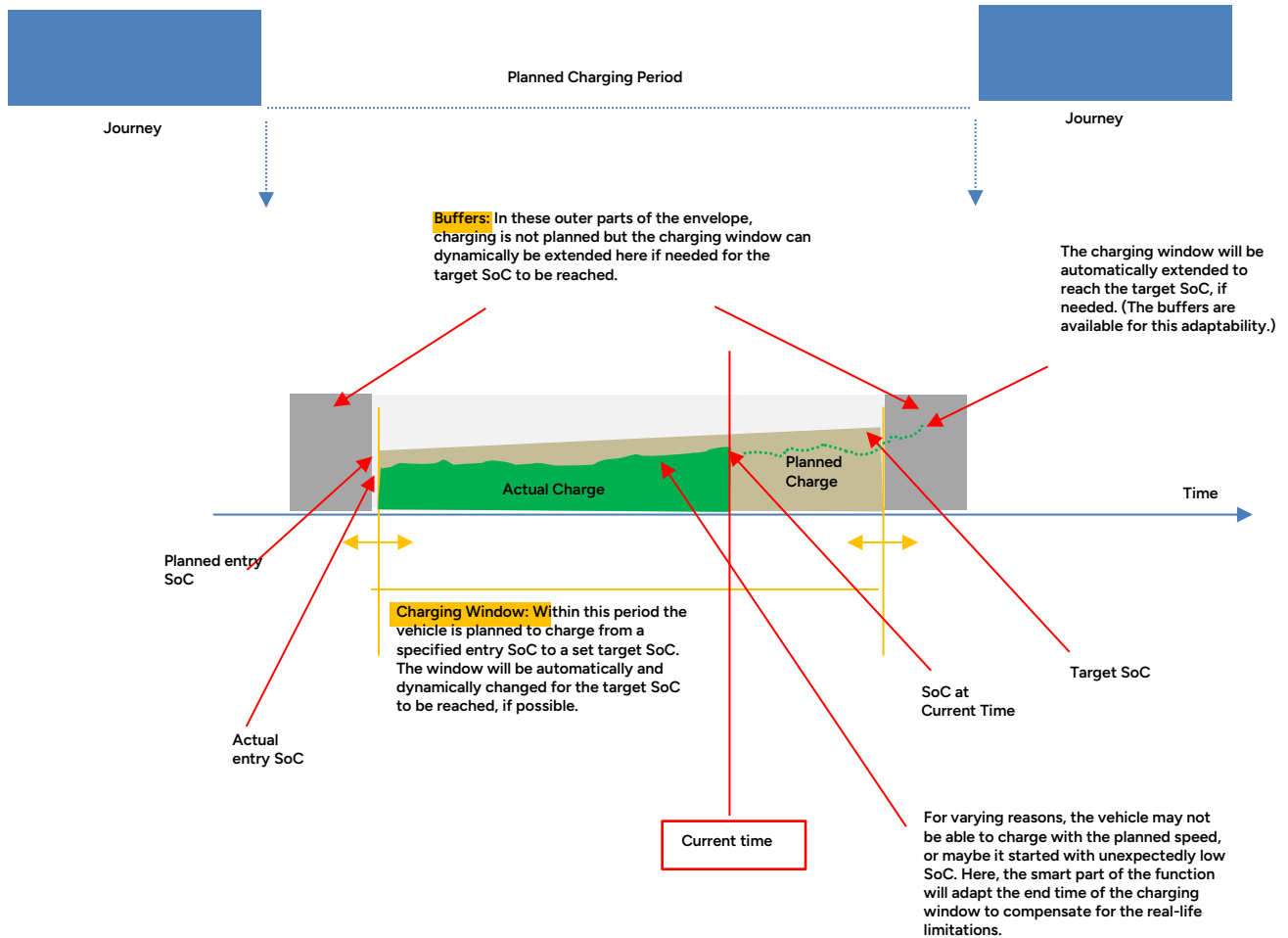
**Note:** A charging window is created when a vehicle is connected to a charger. Only then can the charging window be viewed in the tool, and if needed manually edited, etc.



### Agility

- To make it possible for the system to automatically adapt to varying circumstances, “buffers” are added around each charging window.
- If circumstances force adjustments to be made to the planned charging window, for the target SoC to be reached, the buffers will be used.

As stated, many factors may limit the amount of charging energy reaching the vehicle battery at any one time, so agility and margins are a must in this process. See the image below.



## Smart Charging – Priority, Adaptability

Charging is a process often pressed for time and limited by available power and the amount of energy that the vehicle will “accept”.

This means that when a vehicle arrives at the charger and is connected to receive the planned amount of energy, things will not always be or go as planned: The entry SoC may be lower than planned, the vehicle may be late, other connected vehicles may use a lot of the available energy, extreme cold may limit the accepted charging current, etc.

To solve the problem, or rather, make the best of an unknown situation, Consat Smart Charging will first prioritize each charging vehicle depending on its perceived needs.

- Non-assigned vehicles will have low priority (and a generic open ended charging window with a 100% target SoC).
- **Vehicles with an assignment will be prioritized over vehicles without assignment.**
- **If a charging window is manually edited to “fix a problem”, this may result in the connected vehicle getting higher priority than other assigned charging vehicles (depending on the changes).** This enables a sort of “soft override” functionality for manual problem solving. Choose “as soon as possible” when editing a charging window to assign top priority to that vehicle/window.

# 9 Deviations [Monitor]

**Note:** Depending on your user role/rights Deviations will either show all deviations in your system (Permissions: Deviations\_Read), or only the deviations published to 3:rd part by operators (Permissions: PublishedDeviations\_Read).

Permissions also controls which columns will be displayed for PTA:s in Deviation (PublishedDeviations\_Read), this is configured/system. PTO users can include all columns described below.

**Note:** The specific deviations to be reported to 3:rd part (PTA) are of-course depending on the contract between the PTA and the PTO(s).

The Deviations view will, in real-time, list all deviations as they are saved and published.

- Updated in real-time as the deviations are created by the PTO.
- Drag and drop columns to change the order (like in other FS tools).
- Configure visible columns (like in other FS tools).
- All deviations the current traffic day are listed. Navigate through multiple pages with the controls at the bottom of the list.

ID	Priority	Deviation	DeviationType	Report timestamp	Company Name	Lat	Long	Deviation	Priority	Diagnosis	Place	Status	Case	Published Comment	Location timestamp	Contract type	Monitoring
4343	2	Anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4344	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4345	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4346	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4347	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4348	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4349	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4350	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4351	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4352	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4353	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4354	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4355	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4356	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4357	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong
4358	2	anyong new station	anyongnewstation	2024-06-02 10:10:10	anyong	14301	14301	anyong	2	anyong	anyong	Open	anyong new station	anyong new station	2024-06-02 10:10:10	anyong	anyong

14301 deviations

The number of deviations displayed, of total number current traffic day.

The number of deviations per page (menu), page navigation: fwd/bck

## Column Descriptions

- Note: configurable columns visible/hidden, column order

Header	Description
ID	Deviation ID, use for reference.
Priority	The priority set/configured for the deviation.
Company Name	The company (PTO) reporting the deviation
Deviation	The deviation type/specification – explaining what happened.

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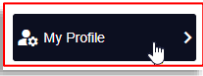
2025-06-02

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Header	Description
Deviation type	Deviation type/category (depending on configuration).
Line	The line serviced when the deviation occurred.
Destination	The journey destination, see Journey below.
Block	The block linked to the deviation (if available).
Journey	The journey linked to the deviation (if available).
Stop Point	The stop point linked to the deviation (if available).
Place	Where the deviation occurred, if not linkable to a traffic data node or if the deviation needs to be pinned to a specific geographical position.
Cause	The cause of the deviation, reported by traffic controller.
Comment	"PTO internal comment" ( <b>Note: not displayed for users with only PublishedDeviations_Read permission, e.g. PTA:s.</b> )
Published Comment	Free text comment from PTO to PTA explaining the deviation.
Calendar Day	The calendar day the deviation occurred
Report Timestamp	When the [automatically generated]deviation was created, or when the deviation occurred according to user manually creating the deviation.
Modified Timestamp	When the deviation was last changed.
Modified by	The user/system that created/or last edited the deviation
Place	Deviation geographical location if applicable (not linked to traffic data node)
Status	The deviation "ticket" status: Processed... etc.
Removed (filter)	If the deviation "ticket" has been removed or not.

# 10 My Profile

In this section, you can access your Customized Reports (including creating such reports), settings, and (report) subscriptions.



## 10.1 Customized Reports

View, edit, delete and create new customised reports here. Your customised reports and shared customised reports are listed in separate sections.

- See chapter 6.10 for more information about customized reports.

My Profile

Customized Reports

Settings

Subscriptions

Customized Reports

Settings

Subscriptions

My Customized Reports

Add

Name	Search Mode	Columns
Filter	Filter	Filter
Test of long name report in menu	Vehicle	Total AdBlue, Total Diesel Engine Start Count, Total Driven Distance, Doors Opened, Alcolock, ...
test 2 SHARED	Vehicle	Total Diesel Engine Start Count, Alcolock, ABS, Brake Activations, Excessive Idling Time, Harsh ...
Coaching Report	Vehicle	Excessive Idling Time, Harsh Acceleration, Harsh Braking, Distance, Consumption, Harsh Curv ...
energyreport	Vehicle	Total consumption used, Total CNG used, Total State of Charge used, Total energy used, Cons ...
test 1	Vehicle	Energy, Distance, Total consumption used, Consumption
perdistance	Vehicle	Total AdBlue, CO <sub>2</sub> /Distance, CO/Distance, NOx/Distance, THC/Distance, PM/Distance
123	Vehicle	Distance, Total consumption used, Consumption, Energy
123123	Vehicle	Total idling time

8 of 8 reports

Items per page: 50

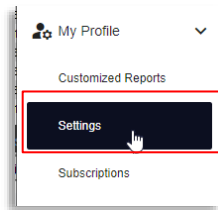
Page 1 of 1

Shared Customized Reports

Name	Search Mode	Columns
Filter	Filter	Filter
Rons Emob favs	Vehicle	Time, Electrical time, Total State of Charge used, State of Charge, Total energy used, Energy
Faulty Report	Vehicle	Brake Activations, Excessive Idling Time, Harsh Curving, Stops w/ ado, Stops w/o ado, NOx, PM/Distan...
CA-5310 - Test Report	Vehicle	NOx, THC, Energy

## 10.2 Settings

Access your user-specific application settings here.



- Separate sections allow you to configure information like Units for energy/fuel/distance, etc., global and tool/view-specific presentation, and thresholds for “states” like deviation (from the timetable), SoC, and Fuel level.
- A Fault-section allows you to select which fault categories are to be included and exclude specific fault types. The section lists all fault types detected so far.
- You can also toggle between the light and dark mode application interface.
- Make your selection and click on Save.



Customized Reports

Settings

Subscriptions

My Settings

Last edit: 2025-02-12 13:05:30

General Settings

Show System Clock

Selected Time Zone

Europe/Andorra

Global Map Center

Longitude\*

-73.5673

Latitude\*

45.5017

Display Name

Vehicle

Name

Vehicle Group

Name

Driver

Name

Driver Group

Name

Units

Distance

Kilometers

Fuel

Liters

Energy

kWh

Average Consumption

Consumption/100 Kilometers

[l/100 km]

[kWh/100 km]

Realtime Settings

Deviation

Deviation Early (s)\*

30

Deviation Late (s)\*

180

State of Charge

Low SOC (%)\*

30

High SOC (%)\*

70

Fuel Level

Low Fuel Level (%)\*

30

High Fuel Level (%)\*

70

Reset (to default) settings

All

Multiplex

Consat Alarms

Beta Settings

Dark Theme

Reset

Cancel

Save

Expand/Minimise section.

Save/Cancel/Reset (to default) settings

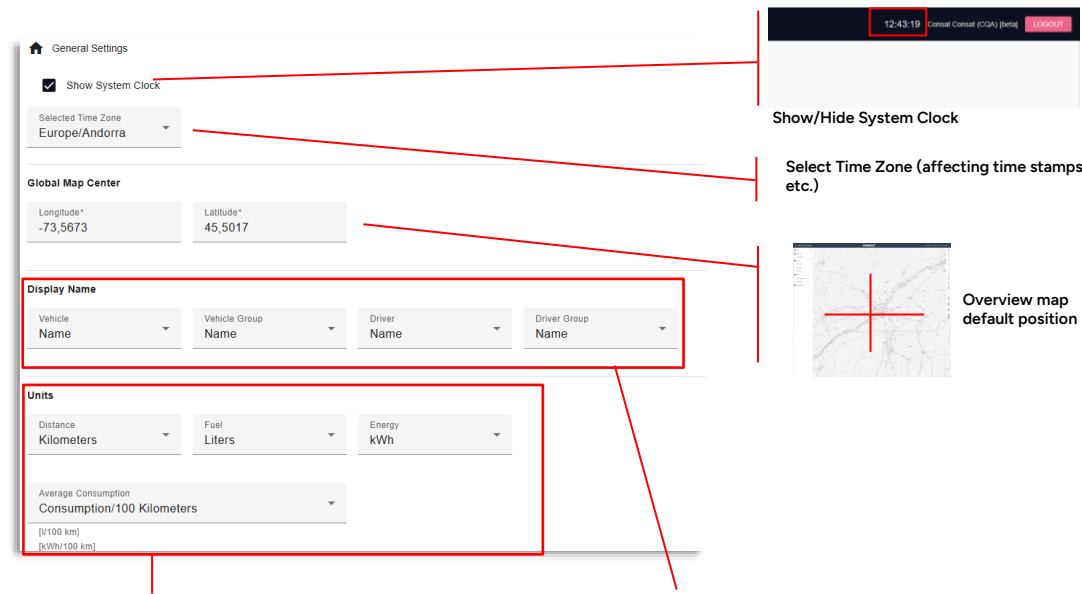
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2025-06-02

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# General Settings

Here you find the application presentation settings.



## Units

- Distance:** Kilometers/Miles
- Fuel:** Liters/Imperial gallons/US Gallons
- Energy:** Joule/kWh
- Average Consumption:**
  - Consumption/100Km
  - Consumption/10Km
  - Consumption/Km
  - Kilometers/100 Consumption
  - Kilometers/10 Consumption
  - Kilometers/Consumption

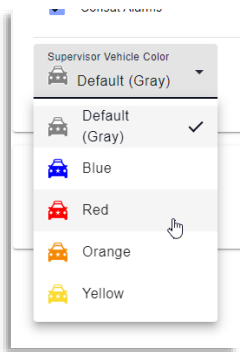
## Display Name

- Vehicle name:**
  - Name
  - Name + System Address
  - Name+ VIN
  - Name+External ID
- Vehicle Group:**
  - Name
  - Name + Description
- Driver:**
  - Name
  - Name + ID
- Driver Group:**
  - Name
  - Name + Description



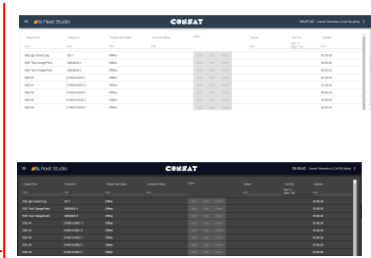
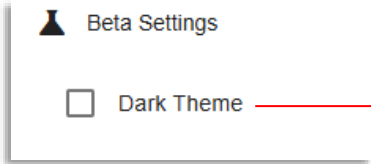
### Supervisor Vehicle Colour (System Dependent Function)

In systems with supervisor vehicles, you can choose a separate, different colour to make these vehicles stand out:



### Beta Settings

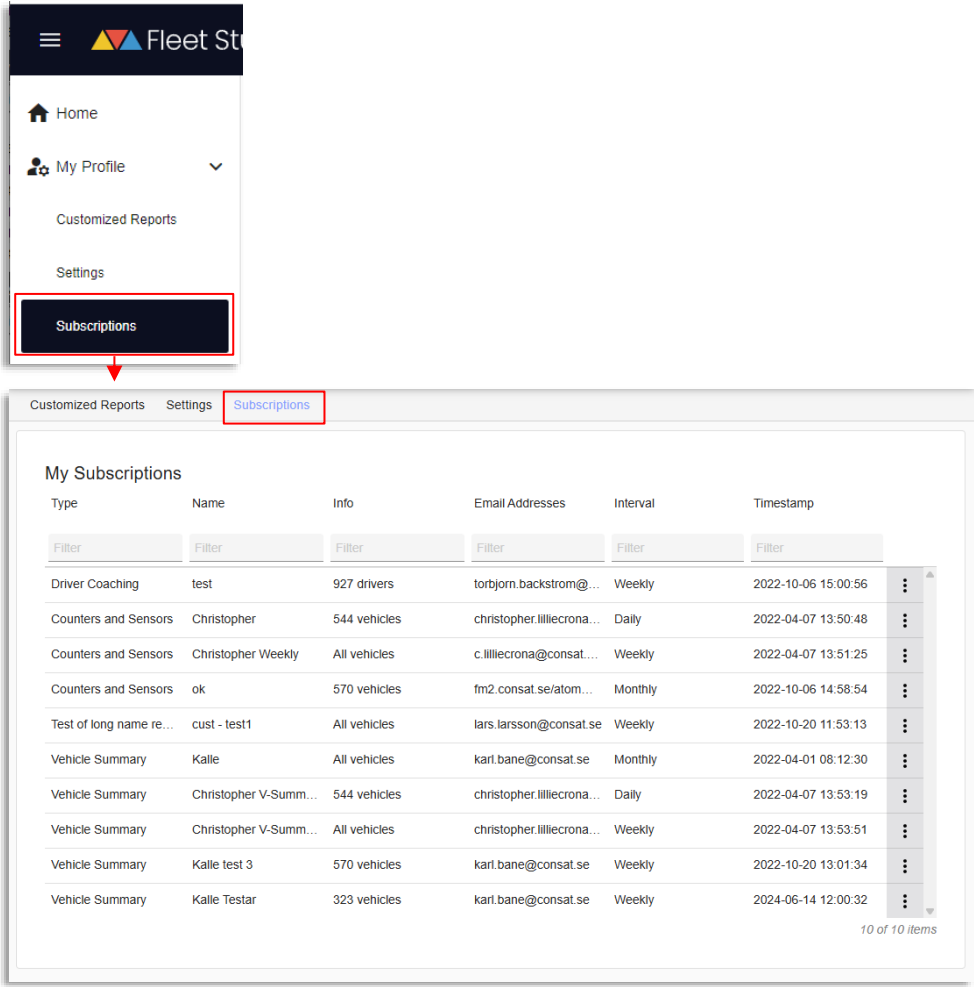
In this section, you can toggle between (not yet officially supported) dark or light interface theme.



Light versus dark theme (Beta).

## 10.3 Subscriptions

Access all your **subscriptions** here. A simple list with basic subscription information shows all currently active subscriptions.



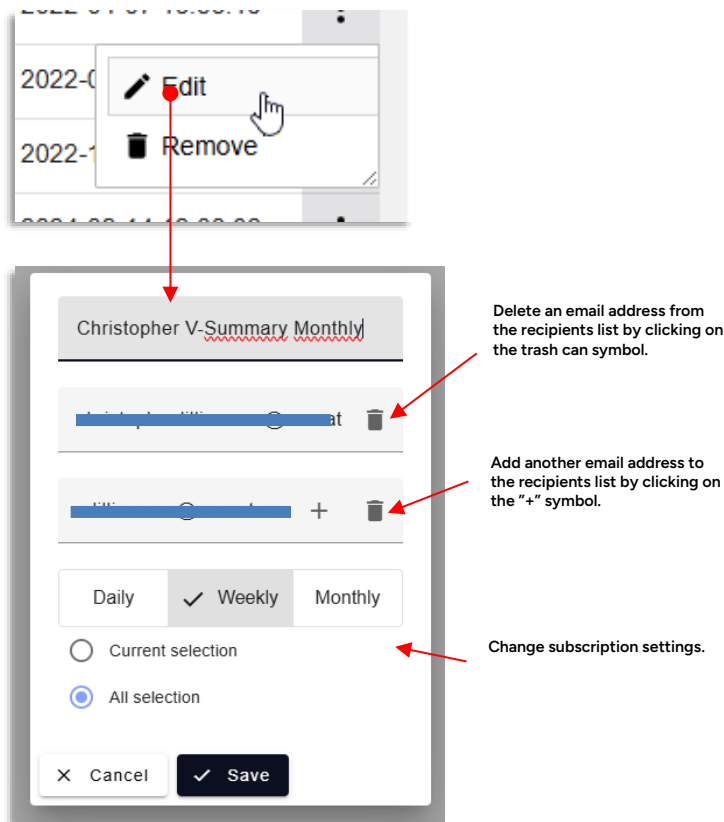
- **Note:** For information about how to subscribe to a report, see chapter 2.8

Header	Description
Type	The view/report the subscription covers
Name	The name entered when starting the subscription
Info	Information about the vehicle selection (number of selected vehicles...)
Email Address	The email address (entered when the subscription was started.)
Interval	The selected subscription interval
Timestamp	Period ends (journey ends)

## Edit a Subscription

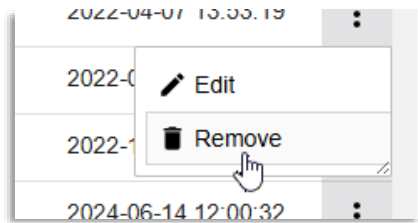
The subscriptions row menu provides access to the same subscription settings you will find in the individual report menu sections. Click on the menu symbol, select Edit and change the subscription settings.

- For information about subscription settings, see chapter 2.8
- **Note:** Click/touch “Done” to save. Click/touch outside the settings box to close it without saving.



## Remove (End) a subscription

The subscriptions row menu provides access to the Remove Subscription function. Open the menu and select Remove to end a currently active subscription.



# 11 Traffic Data

This section handles import and presentation/verification of new imported traffic data in your system.

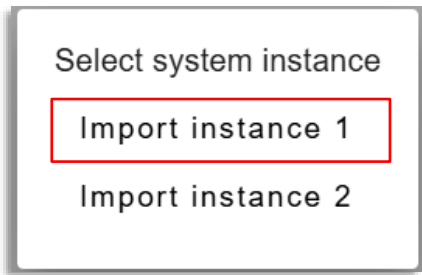
## 11.1 Import Data

This view handles importing and verifying traffic data.

### Select System Instance (multiple instances)

If you have access to more than one system instance, a menu for instance selection will be displayed when you select the Import Data view.

- Select the system instance you want to import traffic data to.

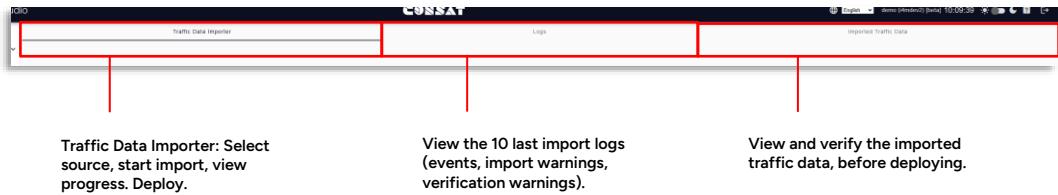


### Tabs: Import, Logs, Imported Traffic data

The view has three tabs: Traffic Data Importer, Logs and Imported (but not yet deployed) traffic data.

(The imported traffic data tab is greyed out during import, until the new imported traffic data is available and can be displayed.)

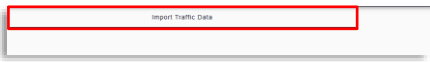
The normal workflow is basically from left to right – start the import, check the logs for errors/warnings and optionally check the traffic data in the right tab, before deploying it (by clicking Accept back on the left Traffic Data Importer tab).



Tab: Import Traffic data

On the Traffic Data Importer tab, you can manually import traffic data in three simple steps.

Traffic data can be imported either from a server (storing traffic data from your planning system) or from a file.



1. Import Traffic Data

In the first, Import Traffic Data, step you start by selecting the appropriate data source. The selection determines the next action in the import process, see below.

**Note:** If you have access to more than one system instance (described in previous section), the currently selected instance is displayed in the import information over the progress meter.

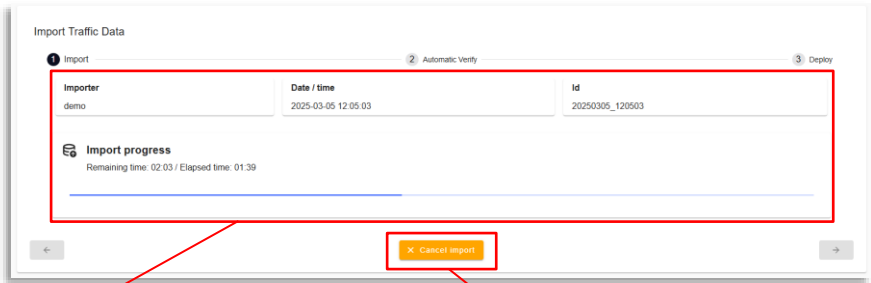
Select data source from the pre-configured menu (system dependent).

**Note:** The menu is not displayed if there is only one data source.

System dependent selection: With a data source specifying file import: Click on the Upload file button, navigate to and select the file folder, click Open to select the file. Click the now blue Next button to proceed.

System dependent selection: With a data source specifying server import: Click the blue Next button to proceed.

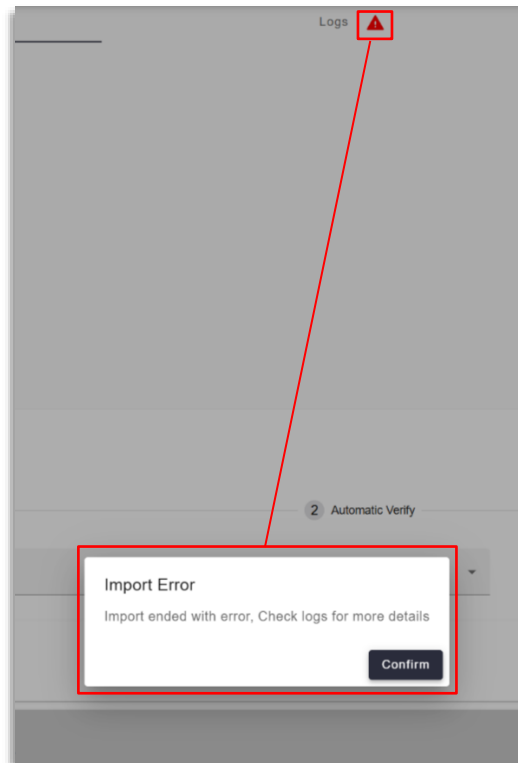
**Note:** Traffic Data files in the folder varies and depends on customer agreement.



- Import information:
- [system instance if applicable]
  - Importer (User)
  - Timestamp
  - Data ID
  - Progress meter
- Click Cancel to abort the import



- Major errors will stop the import process (check the log, see next sub-chapter). A dialog explains what happened and where to find more detailed information. A symbol on the Log tab highlights this.



## 2. Automatic Verify

The traffic data is now automatically compared to the traffic data in use and notable/major discrepancies will be highlighted in the log.

- You can switch to the Log tab to view the log during the import or combine checking the log and the imported traffic data, before you accept and deploy the import in step 3.

Import Traffic Data

✓ Import

**2 Automatic Verify**

3 Deploy

Importer

Date / time

Id

demo

2025-03-11 09:04:10

20250311\_090410

📊 Import progress

Remaining time: 00:00 / Elapsed time: 05:18

A Verify progress meter shows that the data is being verified/statistically compared to the traffic data in use.

Go to the Logs tab (next subchapter) to view details.

## 3. Deploy

In the final, deploy, step, manually accept the traffic data for deployment. When you click “Accept” this process starts.

The data is then distributed to the various system components (central system, vehicle depot for distribution to the vehicles, etc.).

If you instead click Reject you return to step one.

Import Traffic Data

✓ Import

2 Automatic Verify

**3 Deploy**

Importer

Date / time

Id

demo

2025-03-05 12:53:38

20250305\_125209

Deploy Traffic Data

Deploy the uploaded data

⬅️ Reject

Accept ➡️

Return to the previous step without deploying the traffic data.

Accept and deploy the imported traffic data.

Tab: Logs

This view is always available. It shows the last ten import logs (including ongoing import).

As the import and automatic data verification processes progress, the log adds/shows each import/verification event and minor and major problems/errors.

- See the descriptions of specific problems in the corresponding column.

Traffic Data Importer		Logs		Imported Traffic Data	
Data ID	Sequence Number	Stage	Severity	Classification	Description
20250308_103642	3071029			Data import	Ended with error
	3071028			Data import	Started
20250308_103154					
20250308_103000					
20250308_103020					
	3070062			Data import	Aborted
	3070061			Data import	Aborted
	3070060			Data import	Dataimport
	3070059			Data import	Started
20250308_103007					
20250308_115000					
20250308_115040					
20250308_105007					
20250308_105000					
	3069987			Data import	Rejected
	3069986			Data import	Ended and approved
	3069985			Traffic data	Journey statistics
	3069984			Traffic data	Journey statistics
	3069983			Traffic data	Journey statistics
	3069982			Data import	Started
	3069981			Data import	Ended and approved
	3069980			Data import	Dataimport
	3069979			Data import	Started
20250308_103000					
20250308_103000					
20250308_103000					

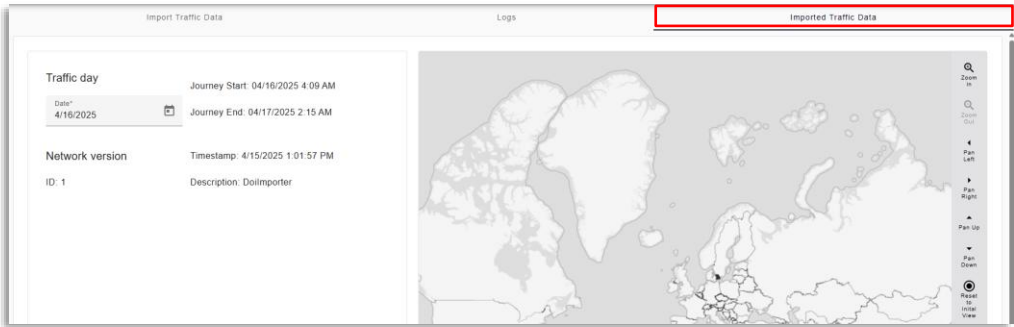
Header	Description
Data ID	Import ID (Date + ID)
Index	Log index no.
Stage	Symbol showing import stage (to be completed in upcoming release) 
Severity	Symbol indicating  information or  problems in the log.  Errors indicated with
Classification	Log row information type (data import/traffic data)
Type	Log "event" type (started/Dataimport/aborted/ended....)
Description	A description of the log event, most including time stamp. Warnings includes information about specific traffic data nodes deemed problematic.

## Tab: Imported Traffic Data

This tab is available when traffic data has been imported but not yet verified. It exactly mirrors the Planned Traffic view (**see the next chapter**).

The difference between the two views is that **this traffic data is not deployed** (in use). The traffic data displayed in the Planned Traffic view is the data in use.

By starting with the log warnings to find potential problems, and checking/comparing the two data views, you can manually verify the new traffic data, before you go ahead and deploy it.



# 11.2 Planned Traffic

- **Note: This function is under development.** We will make many UI changes and add features in upcoming releases. This chapter will then be updated to describe the finished view.

In this view, all traffic data **in use** in the system is displayed on tabs with accompanying detail views for individual items.

(**Note:** The presentation is identical to the Imported Traffic data tab in the Import Data view.)

## Overview

Traffic Day: Menu, select date  
Starts, ends (date, time)

Traffic day

Date\* 4/16/2025

Journey Start: 04/16/2025 12:00 AM

Journey End: 04/17/2025 2:20 AM

Network version


ID: 202504120

Timestamp: 4/11/2025 11:00:05 AM

Description: PROD

Map: Display selected routes, lines, etc.

Map control description: See chapter 5.2



Network Version, information: ID, Last Change timestamp, Description

Blocks (476)

Lines (697)

Journeys (8373)

Stop Areas (12428)

Zones (136)

Companies (66)

Principalities (8)

Blocks

Name
1 (16)
1 2.3 Bybanen (18)
1 8.0 Kleppesta - Strandskaien (7)
1 8.0 Kleppesta - Strandskaien (7)
1 B-3.0 Radne (4)
1 BO-2.0 Guten Skyssbilservice (6)
1 BO-81.0 Fjord1 (10)
1 F-1.0 Viergeland-Halsvik (48)
1 F-2.0 Fjord1 (2)
1 F-2.0 Fjord1 (4)
1 F-2.0 Fjord1 (29)
1 Osterøy ferjeselskap (64)

Traffic Data Nodes, see description below

Traffic Data, selected node

## Workflow: Traffic Data Tabs, Sub-Tabs, Overview

- Traffic Data is displayed on several tabs. One tab per type (Blocks, lines, etc.)
- Select a tab to view included data nodes below. Details for each node is available through the row menu.
- Select a displayed node to open a new sub-tab showing this node data as a list. Details (details tab in expanded section to the right) for each node is available through the row menu.

**1. Select tab  
(node type)**

**2. Select node**

**3. Node data for  
selected node is  
displayed on new sub-  
tab.**

**Note: repeat step 2 for  
any node type to open  
more sub tabs (for  
comparisons etc.).**

**Close tabs with "X"**

**Details, selected node available  
thru row menu**

**3. Node data for  
selected node is  
displayed on new sub-  
tab.**

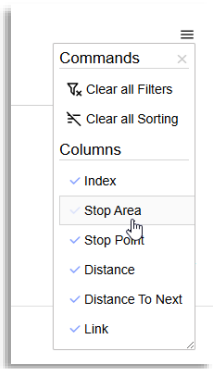
**Note: repeat step 2 for  
any node type to open  
more sub tabs (for  
comparisons etc.).**

**Close tabs with "X"**

**Details, selected node available  
thru row menu**

### Tab Menu: Filters, columns

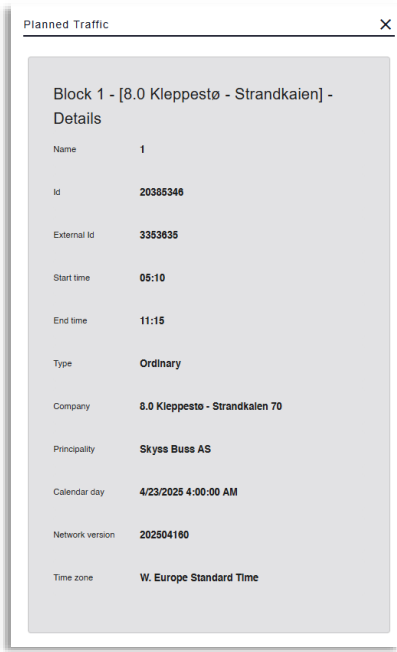
Use the tab menu over the list to clear filters or revert to default sorting and to hide any columns not needed.



### List Column and Detail section Descriptions

Tab: **Blocks** > Journeys in Block > Route (Stop Points)

#### Block Details, Selected Block



Header	Description
Name	Name of the block.
ID	Unique ID of the block in the database.
External ID	Planning system Block ID.
Start Time	When the block starts (start time of the first journey in block).

Header	Description
End Time	When the block ends (end time of the last journey in block).
Type	<p>The type of block. Presently, there are four block types for use in production systems:</p> <p><b>Normal:</b> Standard block with multiple journeys, timetables, etc.</p> <p><b>LineJourney:</b> A block for one line with one journey</p> <p><b>Relative:</b> A block with a relative timetable. The block is initiated by the vehicle.</p> <p><b>NoTime:</b> A block with no timetable, for snowploughs and other service vehicles.</p>
Company	The contractor servicing the journeys in the block
Principality	The transport authority
Calendar Day	The calendar day the traffic data is valid
Network Version	<p>The network version of the displayed traffic data.</p> <p><b>Note:</b> You can keep the detail window, change the calendar day and open a new detail window showing another day's traffic, for comparison purposes.</p>
Time Zone	The time zone the traffic data is planned in (usually where it starts if journeys cross into another zone).

### Journeys in Selected Block, List Columns

Index	Line	Journey	Destination	Journey ID	External ID	Type	Forecast	Start Time	End Time	State of charge, start	State of charge, end
1	2080	1	Leirvik	19885571	15776759_17...	Ordinary	Always	05:10	06:00		
2	2080	3	Sunde	19884504	15776768_17...	Ordinary	Always	06:00	06:44		
3	2080	5	Skånevik	19885170	15776762_17...	Ordinary	Always	06:50	07:40		
4	2080	7	Leirvik	19882424	15776771_17...	Ordinary	Always	07:55	08:37		
5	2080	9	Sunde	19885377	15776763_17...	Ordinary	Always	08:40	09:23		
6	2080	10	Ranavik-Leirvik	19882061	15776779_17...	Ordinary	Always	09:25	10:07		

7 of 7 items

Header	Description
Index	Stop index along the journey (used for sorting the table).
Line	Line serviced by the journey – <a href="#">line details (see description, lines tab)</a> , <a href="#">zoom to on map</a>
Journey	Journey number – <a href="#">journey details</a> , – <a href="#">zoom to on map</a>
Destination	Journey Destination
Journey ID	Unique ID of the journey in the database.
External ID	External journey ID (usually the ID created by the planning system).



Header	Description
Type	<p>The journey type:</p> <p><b>Ordinary</b></p> <p><b>Reinforcement</b></p> <p><b>Replacement</b></p> <p><b>Empty</b> ("pull in/-out" to/from depot/charging station, "deadhead" [empty run between two stop points])</p> <p><b>Extra</b></p> <p><b>Test</b></p> <p><b>Charge (charging window, created by Consat system).</b></p> <p><b>On demand, on demand zone</b> – journeys activated/created from one or more bookings. On demand zone journeys are created in the Journey Planner tool.</p> <p><b>Dynamic</b> (extra journeys not included in traffic data, a free sequence of stops, destination, imported over SiriET)....</p> <p><b>Note:</b> If available, the journey type may be indicated with a journey type symbol.</p>
Forecast	Active/Inactive – If forecasts for the journey are to be presented, on the web, at-stop signs, etc. For empty runs/journeys forecasts are normally "inactive".
Start Time	Planned journey start time.
End Time	Planned journey end time.
State of Charge, Start	Planned SoC [%] at journey start. If included in data.
State of Charge, End	Planned SoC [%] at journey end. If included in data.

### Journey Details, Selected Journey

Planned Traffic

X

Journey [3] Details

Name

3

Id

19884504

External Id

15776766\_171660

Start time

06:00

End time

06:44

Type

Ordinary

Company

8.0 Kleppesto - Strandkalen 70

Principality

Skyss Buss AS

Tariff

-

Contract

-

Line

2080

Route

305

Blocks

1

Destination

Sunde

Description

8.0 Kleppesto - Strandkalen:2080:3:0

Forecast

Always

Journey pattern name

-

Train Journey

-

Train advertised number

-

Calendar day

4/23/2025 4:00:00 AM

Network version

202504160

Time zone

W. Europe Standard Time

Header	Description
Name	Name of the journey.
ID	Unique ID of the journey in the database.
External ID	Planning system journey ID
Start Time	The time when the journey starts.
End Time	The time when the journey ends.

Header	Description
Type	<p>The journey type:</p> <p><b>Ordinary</b></p> <p><b>Reinforcement</b></p> <p><b>Replacement</b></p> <p><b>Empty</b> (“pull in/-out” to/from depot/charging station, “deadhead” [empty run between two stop points])</p> <p><b>Extra</b></p> <p><b>Test</b></p> <p><b>Charge (charging window, created by Consat system).</b></p> <p><b>On demand, on demand zone</b> – journeys activated/created from one or more bookings. On demand zone journeys are created in the Journey Planner tool.</p> <p><b>Dynamic</b> (extra journeys not included in traffic data, a free sequence of stops, destination, imported over SiriET)....</p> <p><b>Note:</b> If available, the journey type may be indicated with a journey type symbol.</p>
Company	Contractor servicing/driving the journey
Principality	The principality where the journey is included.
Tariff	The (ticket price related) journey type E.g. night bus fare etc.
Contract	The Contract the journey is included in. A contract is a set of journeys serviced by an operator.
Line	Name of the line.
Route	Unique ID of the route in the database.
Blocks	Block(s) that include the journey
Destination	Journey's destination.
Description	Line-journey information O:( line ID):(journey ID)
Forecast	Active/Inactive – If forecasts for the journey are to be presented, on the web, at-stop signs, etc. For empty runs/journeys forecasts are normally “inactive”.
Journey Pattern Name	If journey pattern: Name
Train Journey	Train technical number/name – for journeys serviced by trains
Train Advertised Number	Train official ID/Number – for journeys serviced by trains
Calendar Day	The calendar day of the displayed traffic data.
Network Version	The network version of the displayed traffic data.

Header	Description
Time Zone	The time zone where the journey is planned. (If the journey crosses a time zone border, normally the zone where it starts.)

Stop Points, Selected Journey

Stop Points														
Index	Stop Area	Stop Point	Arrival	Departure	Wait	Timing Point	Destination 1	Destination 2	Via	Public message 1	Public message 2	Attributes	Passengers To	Passengers From
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	Leirvik búska	Leirvik bús	-	06:00:00	0:00	Yes	Sunde					-		
2	Banavik b	Banavik b	-	06:16:00	0:00	Yes	Sunde					-		
3	Sunde búska	Sunde bús	06:22:00	06:23:00	0:00	Yes	Sunde					-		
4	Leirvik búska	Leirvik bús	06:44:00	-	0:00	Yes	Sunde					-		
4 of 4 items														

Header	Description
Index	Stop point index along the journey (used for sorting the table).
Stop Area	Name of the stop area – <a href="#">details</a> (see description below), <a href="#">zoom to on map</a>
Stop Point	Name of the stop point – <a href="#">details</a> (see description below), <a href="#">zoom to on map</a>
Arrival	Planned time of arrival to the stop point.
Departure	Planned time of departure from the stop point.
Wait	Planned time of waiting for the vehicle at the stop point.
Timing Point	Indicate if the stop is a regular timing point (if <b>yes</b> , the vehicle must not leave the stop until its scheduled departure time).
Destination 1	Passenger information: Journey destination (for vehicle front sign...)
Destination 2	Passenger information: Complementary journey destination/route information
Via	Passenger information: Via destination used for clarifying route to passengers. (Stop point along the route.)
Public Message 1	Information/message, is normally displayed on the exterior vehicle destination sign (alternating with Via destination if needed). A Public Message can, for instance, be the Company home page, "Merry Christmas!" or similar text.
Public Message 2	Complementary Information/message, see "Destination 2" above
Attributes	If <b>no boarding/alighting</b> is planned at the stop point or if <b>the stop is not public</b> (only used for driver reference).  Also if a vehicle is to stop only after an appointment w. driver. (Presently only traffic data is imported in GTFS format.)
Passengers To	The line number and journey number for each vehicle waiting for passengers from this vehicle. E.g. 45 (342), where 45 is the line, and (342) the journey.

Header	Description
Passengers From	The line number and journey number for each vehicle with passengers wishing to board this vehicle. E.g. 45 (342), where 45 is the line, and (342) the journey.

Tab: **Lines** > Routes > Route (stop points)

Line Details, Selected Line

Planned Traffic

Line 2 Details

Name

2

Id

487

External Id

2

Type

Ordinary

Company

2.3 Bybanen

Principality

Skysse Buss AS

Description

Bybane Fyllingsdalen

Calendar day

4/23/2025 4:00:00 AM

Network version

202504160

Time zone

W. Europe Standard Time

Colors

2

Header	Description
Name	Line Name/Number
ID	Database Line ID
External ID	Organization/Customer Line ID
Type	Public/Test line
Company	The company servicing the line.
Principal Name	The principality where the line is included.
Description	Line description (typically defining route(s) by included stops/destination)
Calendar Day	The calendar day the displayed traffic data is valid for.

Header	Description
Network Version	The network version that the displayed traffic data is included in.
Time Zone	The time zone where the [journeys servicing the] line is planned. (If the line crosses a time zone border, normally the zone where it starts.)

Route Details, Selected Route

Planned Traffic

Route [202204] Details

Name

231

Id

202204

External Id

231

Line

2

Destination

Fyllingsdalen terminal

Description

Kalgaten (avgang) -> Fyllingsdalen terminal A, 11

Direction

2 (5)

Calendar day

4/23/2025 4:00:00 AM

Network version

202504160

Header	Description
Name	Route Name, (number) – for dynamic (TS-created) journeys: "Dynamic####".
ID	Route: ID number
External ID	External ID, if applicable. – For dynamic (TS-created) journeys: "Dynamic####".
Line	Line
Destination	Route destination stop point
Description	Description text for easier identification of the route.
Direction	Route direction info. (if applicable). <b>Note:</b> Both long and short route directions can be displayed, depending on traffic data.
Calendar Day	The calendar day of the displayed traffic data.
Network Version	The network version the displayed traffic data is included in.

Stop Points, Selected Route

Stop Points						
Index	Stop Area	Stop Point	Distance	Distance To Next	Link	
Filter	Filter	Filter	Filter	Filter	Filter	
1	Kaigaten Track 1	Kaigaten (avgang)		0	219	159182
2	MP000011	TB Nonneseter Mec SP1		219	189	161367
3	Nonneseter bybanestopp	Nonneseter		408	296	227385
4	TB Bystasjonen (Line 2) pm412	TB Bystasjonen (Line 2) pm412		704	31	227355
5	Bystasjonen bybane	Bergen bustasjon C		735	1338	227497
6	Fleien bybane	Fleien bybanestopp		2073	743	137344
7	Haukeland sjukehus bybane	Haukeland sjukehus A		2816	930	137431
8	Kronstad bybanestopp	Kronstad C		3746	668	137338
9	Kanabreen bybane	Mindemyren		4414	929	137427
10	Kristiansund bybane	Kristiansund A		6345	920	137480
						11 of 11 items

Header	Description
Index	Stop point index no. on route
Stop Area	Stop Area name – <a href="#">details</a> (see description below), <a href="#">zoom to on map.</a>
Stop Point	Stop point name – <a href="#">details</a> (see description below), <a href="#">zoom to on map.</a>
Distance	Accumulated distance from the route starting point. (unit)
Distance to next	Distance to next stop point (unit)
Link	Link id – this stop point to next

Tab: **Journeys** (all)

Under this node, all journeys are listed. Use the column filters to view specific types, etc.

Journeys																									
Block Name	External Block ID	Block ID	Line	Line Designation	Journey	Train Journey	Train Advertised Number	Product Name	Destination	External Journey ID	Type	Forecast	Journey ID	Journey Start	Journey End	Company	Outlets	Route	First stop	Last stop	Direction	Dynamic Journey	Comment		
5	3316284	20591070	332Z		323				Germund...	15135951_1517365	Ordinary	Always	18187368	00:00	00:20	F 2.0 F3yr	4		Asses to...	Germund...	1				
1	2987789	20591084	332Z		324				Stagnat...	15135917_1517726	Ordinary	Always	18191906	00:00	00:45	F 2.0 F3yr	2		Harwaik t...	Stagnat...	1				
3	3316284	20591070	332Z		325				Asses	15135954_1517365	Ordinary	Always	18197323	00:30	01:05	F 2.0 F3yr	2		Germund...	Asses to...	2				
3	2987789	20591084	332Z		326				Harwaik	15135926_1517726	Ordinary	Always	18149739	00:30	01:35	F 2.0 F3yr	3		Stagnat...	Harwaik t...	2				
3	3316284	20591070	332Z		327				Germund...	15135957_1517365	Ordinary	Always	18195427	01:15	01:35	F 2.0 F3yr	4		Asses to...	Germund...	1				
3	3316284	20591070	332Z		328				Asses	15135946_1517365	Ordinary	Always	18168476	01:45	02:05	F 2.0 F3yr	6		Germund...	Asses to...	2				
2	3316286	20591056	332Z		329				Germund...	15135946_1517365	Ordinary	Always	18144522	03:00	03:20	F 2.0 F3yr	4		Asses to...	Germund...	1				
2	3316286	20591056	332Z		331				Asses	151359584_1517365	Ordinary	Always	18193884	03:30	03:50	F 2.0 F3yr	6		Germund...	Asses to...	2				
ES01_1	F811_1	20640304	ES01		1				Bergen B...	1513593030304	Ordinary	Always	20638523	03:55	04:55	Train Bus...	330 Road		Asses ter...	Bergen to...	Intouard				
V31381_04	V31381_04	20607409	V31381		0408023				Oslo	V3138104080408023	Ordinary	Always	19844832	04:16	08:34	Vo Road t...	V31381 Road		Wetsterna...	Oslo to...	Intouard				
ES01_2	F811_2	20641801	ES01		2				Bergen B...	1513593030304	Ordinary	Always	20633965	04:25	08:25	Train Bus...	330 Road		Asses ter...	Bergen to...	Intouard				

Header	Description
Block Name	Block(s) that include the journey.
External Block ID	See above. Block ID in external system
Block ID	See above. Database Block ID
Line	Line number/name – <a href="#">details</a> (see description above), <a href="#">zoom to on map</a> .
Line Description	Line Sign Content, may differ per journey
Journey	Journey name/number – <a href="#">details</a> (see description above), <a href="#">zoom to on map</a> .
Train Journey	Train technical number/name – for journeys serviced by trains
Train Advertised Number	Train official ID/Number – for journeys serviced by trains
Product Name	Line group name, used by specific systems
Destination	Journey Destination
External Journey ID	Journey ID in external system (usually planning system).
Type	<div>The journey type: <b>Ordinary</b> <b>Reinforcement</b> <b>Replacement</b> <b>Empty</b> <b>Extra</b> <b>Test</b> <b>Dynamic</b> (extra journeys not included in traffic data, a free sequence of stops, destination, imported over SiriET).... <b>Note:</b> If available, the journey type may be indicated with a journey type symbol.</div>



Header	Description
Forecast	Active/Inactive – If forecasts are to be presented, on the web, at-stop signs, etc. For empty runs/journeys forecasts are normally “inactive”.
Journey ID	Database Journey ID.
Journey Start	Planned Journey start time.
Journey End	Planned Journey end time.
Company	The company servicing the journey.
Duties	Duties including this journey
Route	Route number – <a href="#">details</a> (see description above), <a href="#">zoom to on map</a> .
First Stop	First stop point on the journey
Last Stop	Last stop point on the journey
Direction	Route direction info. (if applicable). <b>Note:</b> Both long and short route directions can be displayed, depending on traffic data, see below.
Dynamic Journey	If journey is dynamic (true/false)
Comment	Journey comment

Tab: **Stop Areas & Stop Points**

**Stop Area Details, Selected Stop Area**

Planned Traffic

X

StopArea Aarland [12446714] - Details

Name

Aarland

Id

12446714

External Id

12446714

Municipality

Austevoll

Short name

Aarland

Full name

Aarland

Attributes

-

Network version

202504160

Header	Description
Name	Stop Area Name
ID	ID number
External ID	External ID
Municipality	The municipality the stop area belongs to
Short Name	Alternative short name for Stop Area (not used by all systems, if not specific, same as "Name")
Full Name	The full name for Stop Area. (If not specific, same as "Name")
Attributes	<div>Stop Area type, properties, e.g. "station" (with multiple Gates, Used by Station manager tool...), "not public" (Not a real stop point but a journey point used as starting point for an empty run from a depot, etc.)</div> <div>The following pre-defined attributes may be included:</div> <ul style="list-style-type: none"><li>Electrical charging</li><li>Test</li><li>Navigation</li><li>Shelter</li><li>Sign post</li><li>Lay by</li><li>Bench</li><li>Info booth</li><li>Wheelchair accessibility</li></ul>
Network Version	The network version of the displayed traffic data.

Stop Points, Selected Stop Area

Stop Points				
Name	External ID	Boarding	Alighting	Zones
<div>Filter</div>	<div>Filter</div>	<div>Filter</div>	<div>Filter</div>	<div>Filter</div>
Aarland	12446714	Yes	Yes	
1 of 1 items				

Header	Description
Name	Stop point name.
External ID	The external ID for the stop point.
Boarding	Yes/no – if passengers are allowed to board vehicles.
Alighting	Yes/no – if passengers are allowed to alight vehicles.
Zones	The zone/zones the stop point belongs to (if applicable).

Tab: Companies

Company Details, Selected Company

Details

Name

1.5 Modal

Id

5

External Id

5

Short name

1.5 Mod

Description

1.5 Mod:

Calendar day

4/23/2025 4:00:00 AM

Network version

202504160

Header	Description
Name	Company name
ID	Company ID (system)
External ID	External Company ID
Short Name	An optional short version of the company name for use where space is an issue
Description	Alternative/complimentary name/description
Calendar Day	The selected calendar day (related to the planned journeys displayed below).
Network Version	The network version of the displayed information.

**Journeys, Selected Company**

This list presents the same journey information as the other journey lists, but shows only the selected company's journeys. See description above.

**Tab: Principalities**

**Principality Details, Selected Principality**

Planned Traffic

- Details

Id

110000099

External Id

-

Principality

Header	Description
ID	System ID for the principality
External ID	External system ID for the principality
Principal Name	The name of the principality

**Journeys, Selected Principality**

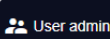
This list presents the same journey information as the other journey lists, but shows only the selected principalities journeys. See description above.

# 12 Admin

The views in this section are used for administering users, companies (read only), vehicles, vehicle groups and zones.

## 12.1 User Admin

If you have the **FMS\_SuperAdmin**, **FMS\_AdminUser**, **Power user**, and/or **Super user** roles, you will find the User Admin menu item in the main menu.



In this section, you can add (create), clone, edit, and remove users in your organization.

(Note: These users may have not only Fleet Studio but Traffic Studio and other access in the system so the settings may affect other applications as well.)

### Overview

The User Admin view is a simple list – of users. Use the column-free text filters, the role filter (see below), and sorting functionality, to find the information you need in the potentially very long list.

User Admin					
Company	Username	Given name	Surname	Description	Role
Filter	Filter	Filter	Filter	Filter	Filter
Consist [5]	SALES_SuperAdmin	SALES_SuperAdmin	SALES_SuperAdmin	SALES_SuperAdmin	FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany
Consist [5]	FMS_importer	FMS_importer	FMS_importer	The importer	
Consist [5]	FMS_exporter	FMS_exporter	FMS_exporter	The exporter	
Consist [5]	OS_Therapist	OS_Therapist	OS_Therapist	The OS therapist	
Consist [5]	OSync_Admin	OSync_Admin	OSync_Admin	The OS Sync	
Consist [5]	VehicAgreementImporter	VehicAgreementImporter	VehicAgreementImporter	The VehicAgreementImporter	
Consist [5]	RESOURCE_user1	RESOURCE_user1	RESOURCE_user1	a new user/ramenitok user	
VSC Test [1]	Emmanuel	Emmanuel	Emmanuel		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports
Lyndal [5]	Emmanuel	Emmanuel	Emmanuel		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany
Lyndal [5]	Thomas	Thomas	Thomas		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports
VSC Test [100]	valve_test	valve_test	valve_test		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports
VSC Test [1]	Gertraud	Gertraud	Gertraud		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports
VSC Test [100]	benard	benard	benard		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports
Consist Telematics [2]	benard2	benard2	benard2		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports FMS_A...
VSC Test [1000]	Emil	Emil	Emil		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports FMS_A...
Lyndal [5]	David_Volkert	David	David		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports FMS_A...
Consist [5]	Niclas	Niclas	Niclas		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports FMS_A...
Consist [5]	Niclas_Admin	Niclas	Niclas		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports FMS_A...
VSC Test [100]	Amr	Amr	Amr		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports FMS_A...
Consist [5]	David_Gustafson	David	David		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports FMS_A...
Consist [5]	Zenobia_Super	Zenobia	Zenobia		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports FMS_A...
Luernberg Data [10240]	Niclas_Super	Niclas	Niclas		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports FMS_A...
Consist [5]	David_Gustafson_Admin	David	David		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports FMS_A...
Consist [5]	FMS_Subscription	FMS_Subscription	FMS_Subscription	The subscription	
SBS Transit Ltd [10076]	Zenobia_Ale	Zenobia	SBS		FMS_AdminUser FMS_AdminVehicle FMS_AdminCompany FMS_ViewDriverReports FMS_ViewVehicleReports FMS_A...

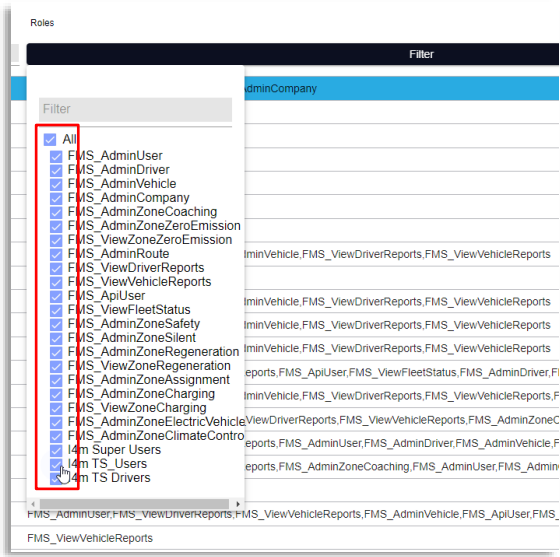
Header	Description
Company	The company the user belongs to/has access to.  (Note that a company may have access to other companies' vehicles/data, depending on the configuration.)
Username	Unique user name
Given Name	User given name
Surname	User surname
Description	User description (optional, entered when adding a user)

Header	Description
Roles	The roles assigned to the user (comma separated).

User Role Filter

To only view users with specific roles assigned, use the Role filter. Click on the filter header to open the filter menu and check/un-check boxes to set the filter to your liking.

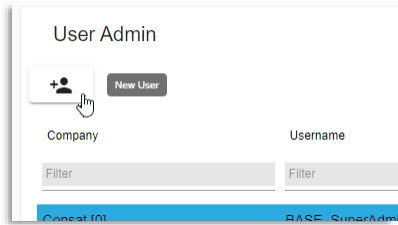
- **Note:** The available roles may vary and change. Check your system description for information about the roles used in your system.



Add a new User

Adding a new user is a simple two-stage process: First, you enter basic user information. Then you define the roles the user is to have. The assigned roles govern the users' functionality access in the system/application.

1. Click on the **New User** button.



2. The Add User dialogue opens. Select the Company the user is to belong to (have access to) in the top Company menu and enter a username, password, email, name, and description.

Note that missing entries and entries not meeting requirements are highlighted in orange. Requirements are also described in orange. When all fields are filled in correctly (no orange highlights), click on **Next** to move to the next stage.

Add User

1 Info

2 Roles

Username \*

superadmin

Password \*

\*\*\*\*\*

2

- 1 digit(s)  
- 1 upper case letter(s)

Email

Given Name

Surname

Description

Back

Next

Cancel

Save

3. Now assign user roles by moving roles from the Available list to the Selected list. (The process is identical to how you select vehicles to be included in reports, see previous sections.)

Add User

1 Info

2 Roles

Available

Select All

Selected

Deselect All

Filter

FMS\_AdminZoneRegeneration  
FMS\_ViewZoneRegeneration

Filter

FMS\_AdminUser  
FMS\_AdminVehicle  
FMS\_AdminCompany  
FMS\_AdminZoneCoaching  
FMS\_AdminZoneZeroEmission  
FMS\_ViewZoneZeroEmission  
FMS\_AdminRoute  
FMS\_ViewDriverReports  
FMS\_ViewVehicleReports  
FMS\_ApUser  
FMS\_ViewFleetStatus  
FMS\_AdminZoneSafety  
FMS\_AdminZoneSilent  
FMS\_AdminZoneAssignment  
FMS\_AdminZoneCharging  
FMS\_AdminZoneElectricVehicle  
FMS\_AdminZoneClimateControl  
I4m Power Users  
I4m Super Users  
I4m TS\_Users  
I4m TS Drivers  
I4m Import

Back

Next

Cancel

Save

4. Save the new user by clicking on **Save**.

Back

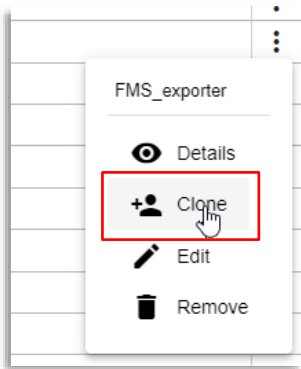
Next

Cancel

Save

### Clone a User

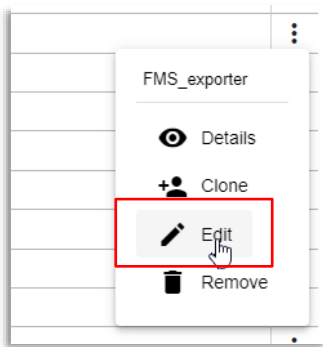
In the User (row) menu, select **Clone** to make a “copy” of an existing user’s **company and role settings**.



- See “Add User” above for how to enter/change user details.

### Edit User

In the User (row) menu, select **Edit** to make changes to a user’s password/names/roles...

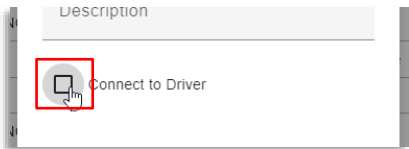


- See “Add User” above for how to enter/change user details and roles.

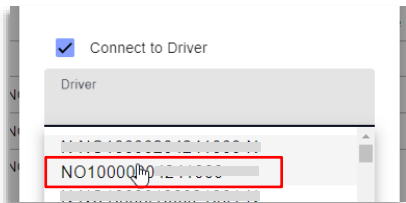
### Connect User to a Driver

**Note:** Edit User also includes a function to connect the edited user to a driver in your driver list (not yet connected to a user):

1. Click the Connect to Driver checkbox.

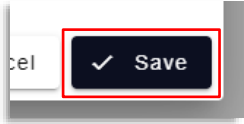


2. Select driver in the menu.



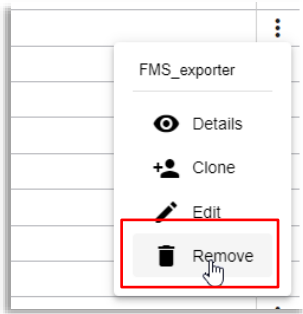


3. Save your changes.



Delete [Remove] User

To remove a user from the list, select **Remove** in the User (row) menu.



## 12.2 Company Admin

This view is a simple read-only list of the companies in your system. Basic information about each company and active status information is available.

### Overview

Company Admin

Active	id	name	description	modified time
Filter	Filter	Filter	Filter	Filter
✓	1	1		23.27.01 (9th Oct)
✓	6	6		23.27.01 (9th Oct)
✓	8	8		23.27.01 (9th Oct)
✓	9	9		23.27.01 (9th Oct)
✓	10	10		23.27.01 (9th Oct)
✓	11	11		23.27.02 (9th Oct)
✓	99	99		23.27.02 (9th Oct)
✓	302	302		23.27.02 (9th Oct)
✓	395	395		23.27.02 (9th Oct)
✓	513	513		23.27.02 (9th Oct)
✓	100000258	100000258		23.27.02 (9th Oct)
✓	190000923	190000923		23.27.02 (9th Oct)
✓	210000327	210000327		23.27.02 (9th Oct)
	1500000001	Agder Kollektivtrafikk AS	Agder Kollektivtrafikk AS	19.09.03 (12th Sep)
✓	1500000002	Boreal@AKT	Boreal@AKT	2023-02-09 12:06:02
✓	1500000003	Boreal Buss AS	Boreal Buss AS	19.09.03 (12th Sep)
✓	1600000002			23.27.02 (9th Oct)

17 of 17 company

Items per page: 50Page 1 of 1

Page Configuration, Navigation Section

Header	Description
Active	Active state (check) – column filter available to show only active companies, etc.
ID	Company ID in the system
Name	Company name
Description	Free text company description/notes
Modified Tome	When the information was last changed.

### Details

Company Admin

Active	id	name	description	modified time
Filter	Filter	Filter	Filter	Filter
✓	1	1		23.27.01 (9th Oct)
✓	6	6		23.27.01 (9th Oct)
✓	8	8		23.27.01 (9th Oct)
✓	9	9		23.27.01 (9th Oct)
✓	10	10		23.27.01 (9th Oct)
✓	11	11		23.27.02 (9th Oct)
✓	99	99		23.27.02 (9th Oct)
✓	302	302		23.27.02 (9th Oct)
✓	395	395		23.27.02 (9th Oct)
✓	513	513		23.27.02 (9th Oct)
✓	100000258	100000258		23.27.02 (9th Oct)
✓	190000923	190000923		23.27.02 (9th Oct)
✓	210000327	210000327		23.27.02 (9th Oct)
✓	1500000001	Agder Kollektivtrafikk AS	Agder Kollektivtrafikk AS	19.09.03 (12th Sep)
✓	1500000002	Boreal@AKT	Boreal@AKT	2023-02-09 12:06:02
✓	1500000003	Boreal Buss AS	Boreal Buss AS	19.09.03 (12th Sep)
✓	1600000002			23.27.02 (9th Oct)

17 of 17 company

Items per page: 50Page 1 of 1

Company

Company Details

id: 1500000001

Active

Company

0

Agder Kollektivtrafikk AS

Agder Kollektivtrafikk AS

Agder Kollektivtrafikk AS

2024-09-12 19:09:03

Select a row to view company details. All information about the company is displayed.

This view displays the available vehicle data/parameters for the vehicles in your fleet. (The vehicles you have access to.) You can enter/edit parameters/settings for a selected vehicle in the Edit menu available for each vehicle.

- **Note:** For information about vehicle entity data presented in the list and details section, see the separate document "Vehicle Attributes Import Format Guide" that you will find in the Doc/Guides section of your system portal.



## Overview

## Page Configuration, Navigation Section

Details

Select Details in the row menu to open the Details tab for the vehicle.

0	3130109430
0	
0	
250	
250	

 Details  
 Edit


Select Details in the row menu.

Vehicle Entity


Vehicle Admin Details

auto-Victoria-9430


3130109430

 Vehicle ID

29

 Company ID

322

 Is Active

true

[MSISDN]

--

[OPERATOR\_ID]

322

[VEHICLE\_DESCRIPTION]

Generated by VolvoImporter

[VEHICLE\_BUS\_TYPE\_EXTERNAL]

VolvoType\_2015-06-02 14:10:47

[VEHICLE\_LEGAL\_VIN\_EXTERNAL]

--

[VIN]

Victoria-9430

[FUEL\_TYPE]

Diesel

[EMISSION\_CLASS]

EuroIII

[ROAD\_SPEED\_LIMITER]

90

[TOP\_GEAR]

12

[OVER\_REV]

2300

Basic Vehicle Information:  
ID, Company ID, Active Status

All data/parameter cells for  
the vehicle (scroll to find  
item)

## Edit Vehicle Data

In this section you can edit data/parameters for the selected vehicle.

3130109427

Details

Edit

Select Edit in the row menu.

auto-Victoria-9430

Search

String

Boolean

Number

Decimal

Vehicle

[LOW\_FLOOR]

[HCP]

[LOW\_ENTRY]

[VISUAL\_INFORMATION]

[AUDIO\_INFORMATION]

[SUITABLE\_FOR\_WHEEL\_CHAIRS]

[RAMP\_OR\_LIFT]

← Back

→ Next

✕ Cancel

✓ Save

Free text search/filter the data list below

Filter: View data by type of data entry: String (enter text/numbers) or Boolean (true/false settings) / Number (numerical entries) / Decimal (numerical, decimal entries) or Vehicle (vehicle type, etc.)

Depending on above filters: Resulting data list. View/enter/change as needed.

Switch data type filter. (Move to the left/right in the type selection menu above.)

Cancel (close without saving) or save entries/changes.

## 12.4 Vehicle Group Admin

In this section, you can view all available vehicle groups, and the vehicles belonging to these groups.

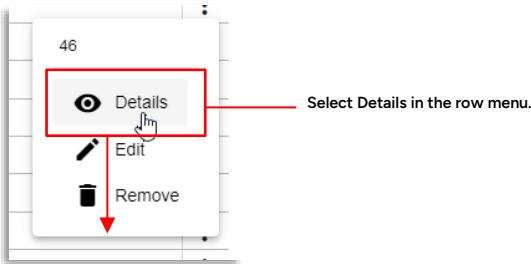
### Overview

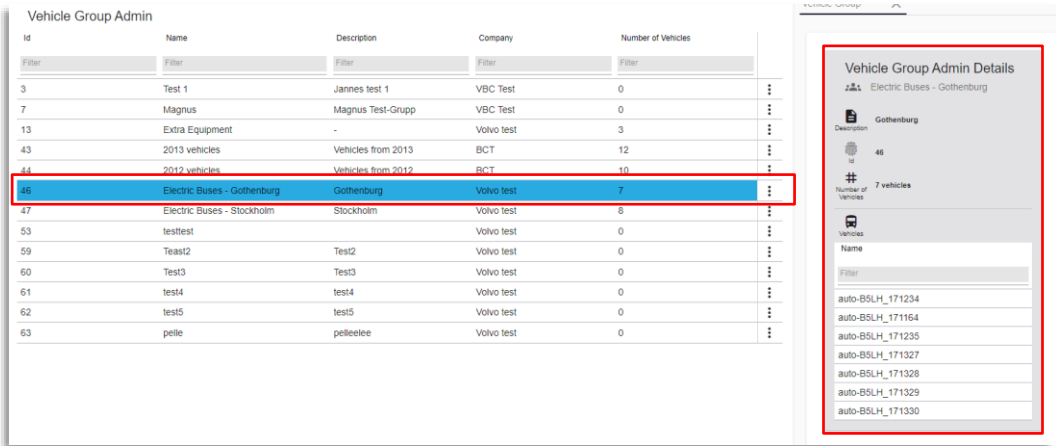
Vehicle Group Admin				
Id	Name	Description	Company	Number of Vehicles
Filter	Filter	Filter	Filter	Filter
3	Test 1	Jannes test 1	VBC Test	0
7	Magnus	Magnus Test-Grupp	VBC Test	0
13	Extra Equipment	-	Volvo test	3
43	2013 vehicles	Vehicles from 2013	BCT	12
44	2012 vehicles	Vehicles from 2012	BCT	10
46	Electric Buses - Gothenburg	Gothenburg	Volvo test	7
47	Electric Buses - Stockholm	Stockholm	Volvo test	8
53	testtest		Volvo test	0
59	Teast2	Test2	Volvo test	0
60	Test3	Test3	Volvo test	0
61	test4	test4	Volvo test	0
62	test5	test5	Volvo test	0
63	pelle	pelleeee	Volvo test	0

Header	Description
ID	Group ID
Name	Group name
Description	Group description (free text)
Company	The Company that "owns" the group
Number of Vehicles	The number of vehicles belonging to the group

### Vehicle Group Details

The details section shows the specific vehicles belonging to the selected group.

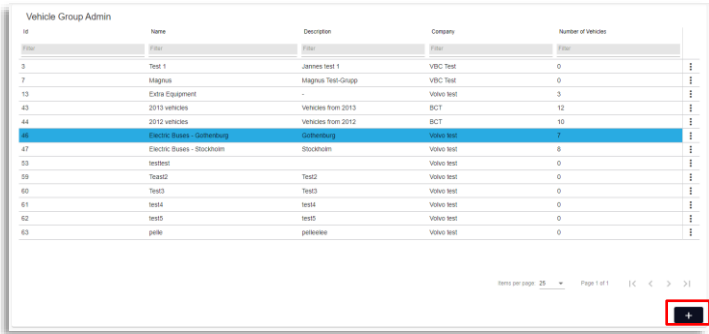




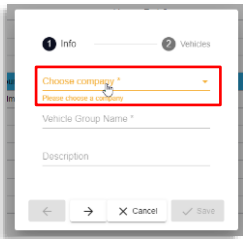
Outside the basic group information (also shown in the list) the details section lists all the vehicles in the group.

Create new Vehicle Group

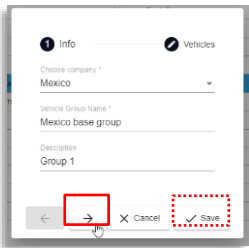
- 1. Click on the New Vehicle Group button in the bottom right corner. The create vehicle group menu is displayed.



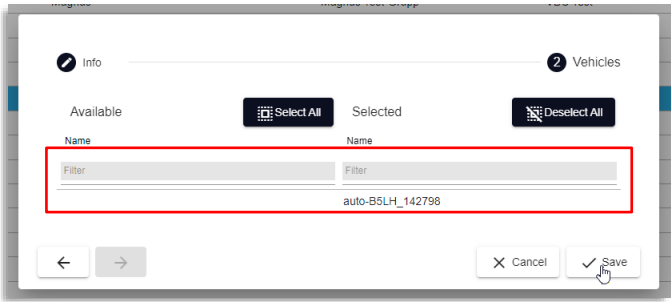
- 2. Select the company the group is to belong to in the top menu.



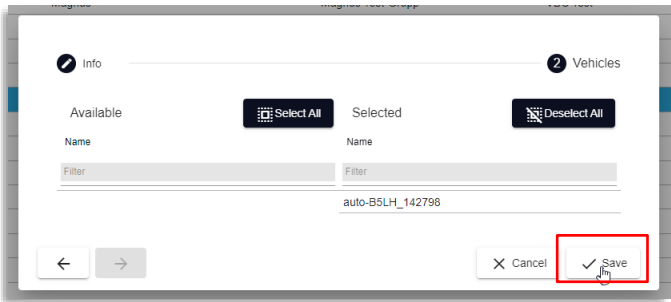
- 3. Enter the group name and if applicable a description in the corresponding fields.
- 4. Now you can either save the group without selecting vehicles (with the Save button), or click on the right arrow button and proceed to add vehicles to the group.



5. Select the vehicle/vehicles that are to be included in the group. (Only vehicles belonging to the selected company are listed and can be included.)

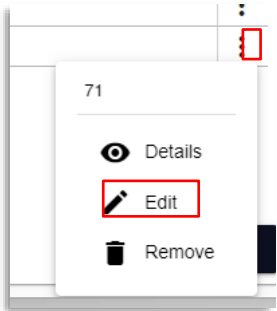


6. Save the group (w selected vehicles).

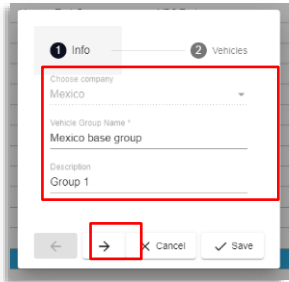


Edit a Vehicle Group

1. In the row menu: Select **Edit**.



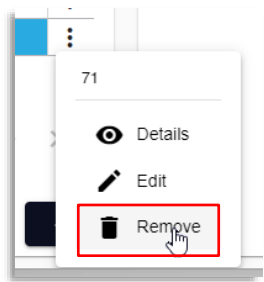
2. The [edit] vehicle group menu opens, **change company** (changes vehicle selection), **name** or **description**, click on the right arrow to switch to edit the **vehicle selection**. Then **save**.





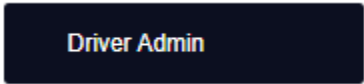
## Remove a Vehicle Group

In the row menu, select **Remove**, the group is removed immediately (no confirmation dialogue).



## 12.5 Driver Admin

If you have the **FMS\_AdminDriver user role**, you will find the Driver Admin menu item in the main menu.



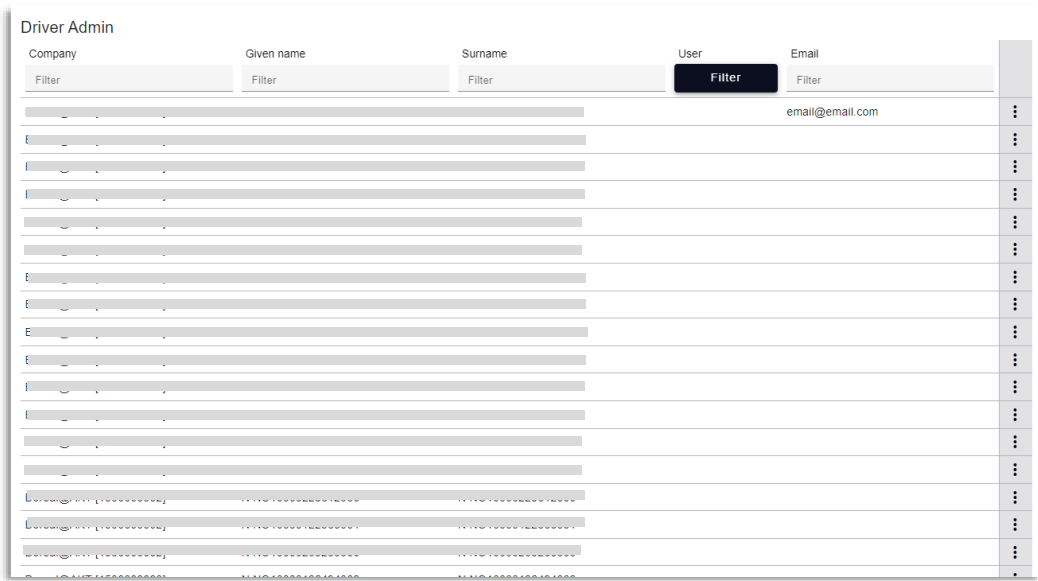
- Drivers must currently be imported into the system in a separate process to create the list in this view.

**Drivers can be made into users, for example to access their personal Fleet Studio Driver Coaching views. This is performed with the row menu function “Add User”, see the description below.**


### Overview

The Driver Admin view is a simple driver list, showing all drivers imported into your system. Use the column free text filters, the User filter (see below), and sorting functionality, to find the information you need in the potentially very long list.

Note that you cannot create drivers in Fleet Studio. You can create users with the role “driver”, tough, see the previous User Admin chapter for how to do this.

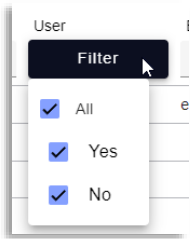


Header	Description
Company	The company the driver belongs to.
Given Name	User given name  Note: Depending on imported driver data, tacho Id may be displayed instead of given name.

Header	Description
Surname	User surname  Note: Depending on imported driver data tacho, Id may be displayed instead of given name.
User	Indicates if the driver is currently also a FS user.  (Indicated with a  symbol)
Email	Driver email, if available

User Filter

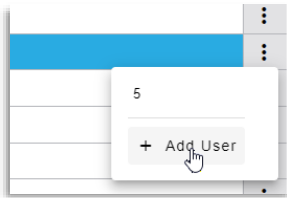
This filter makes it possible to only view drivers that are also FS users, or drivers that are not FS users, if needed. Check the yes/no box to filter the list.



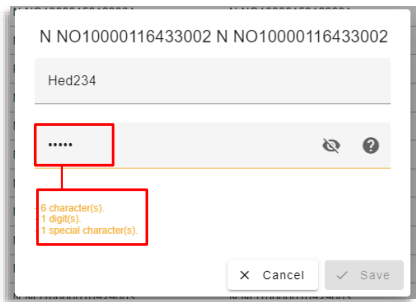
Make Driver into User

Use the row menu "Add User" function to make a user based on the driver in the list.

- 1. In the row menu: Select Add User.



- 2. Enter a unique username and password. (Password rules displayed if the current entry is not ok, see below).



- 3. When username and password is ok, click Save to create the user. This user will get the "driver" role by default. To add/change properties/roles, use the User Admin view, see the previous chapter.

## 12.6 Driver Group Admin

In this section, you can view and administer driver groups, including driver group membership.

### Overview

Driver Group Admin

ID	Name	Description	Company	Number Of Drivers
1	ACDER	Silverlight	1500000002	6
108	hshfda		6	5
109	shfada		9	0
110	hghghf		395	0
111	hghghgh	hghghgh	1500000003	7
112	ghghh	hghgh	1500000002	7
113	uyghy		9	8

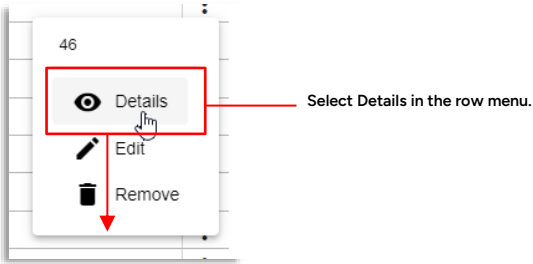
7 of 7 items

+ Add group

Header	Description
ID	Group ID
Name	Group name
Description	Group description (free text)
Company	The Company that "owns" the group
Number of Drivers	The number of drivers belonging to the group

### Driver Group Details

The details section shows the drivers belonging to the selected group.



Driver Group Admin

Id	Name	Description	Company	Number Of Drivers
1	AGDER	Silverlight	1500000002	6
112	test 3	test 3 description	1500000002	8
119	test		6	3
120	Test1	Test1	6	5
125	Ny Grupp	Ny Grupp	8	5
191	sdfafsd		8	3
192	fsdfs		8	4
193	fsdfs		8	12
196	fsdfsaf		8	5
197	fsfsdtd		8	0
198	dsadsa		6	13
199	dfs		9	32

12 of 12 items

+ Add group

Driver Group

Driver Group Admin Details

Ny Grupp

Id

128

Number of Drivers

5 drivers

Drivers

Name

Filter

N NO10000046034002 N NO1000004603

N NO10000133405001 N NO1000013340

N NO10000216280000 N NO1000021628

N NO1000053092002 N NO100005309

N NO10000109058002 N NO1000010905

Outside the basic group information (also shown in the list) the details section lists all the drivers in the group.

Create new Driver Group

3. Click on the New Vehicle Group button in the bottom right corner. The create vehicle group menu is displayed.

Driver Group Admin

Id	Name	Description	Company	Number Of Drivers
1	AGDER	Silverlight	1000000002	6
108	fsdfs		6	5
109	dsfsd		9	
110	hghyf		395	0
111	hghyng	hghyng	1000000003	7
112	grdn	hghn	1000000002	7
113	vsfvy		9	8

+ Add group

4. Select the company the group is to belong to in the top menu.

1 Info

2 Drivers

Choose company

1

6

8

9

10

11

5. Enter the group name and if applicable a description in the corresponding fields.

The screenshot shows the 'Info' tab of the CTS Fleet Studio interface. The 'Info' tab is selected, and the 'Drivers' tab is also visible. The 'Group Name' field contains 'Joh' and the 'Description' field is empty. Both fields are highlighted with red dashed boxes. The bottom navigation bar shows a back arrow, a right arrow, a cancel button, and a save button.

6. Now you can either save the group without selecting drivers (with the Save button) or click on the right arrow button and proceed to add drivers to the group.

The screenshot shows the 'Info' tab of the CTS Fleet Studio interface. The 'Info' tab is selected, and the 'Drivers' tab is also visible. The 'Group Name' field contains 'John Doe' and the 'Description' field contains 'keen'. The 'Group Name' field is highlighted with a red solid box, and the 'Description' field is highlighted with a red dashed box. The bottom navigation bar shows a back arrow, a right arrow, a cancel button, and a save button. The right arrow button is highlighted with a red solid box, and the save button is highlighted with a red dashed box.

7. Select the driver/drivers that are to be included in the group. (Only drivers belonging to the selected company are listed and can be included.)

Info

2 Drivers

Available

Select All

Selected

Deselect All

Name	Name
Filter	Filter
N	426000
N	240003
N	770000
N	354000
N	857022
N	533001
N	239003
N	134000
N	575002
N	515002
N	796001
N	234002
N	981003
N	510003
YS	
N	171000
N	376000
N	399002
N	075003
N	026002
N	770010
N	713001
N	765000
N	211002
N	866000
N	N

←

→

Cancel

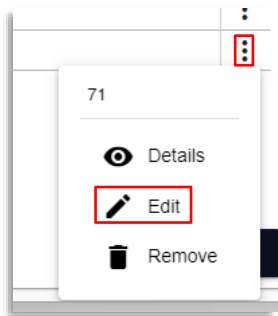
Save

8. Save the group (w selected drivers).



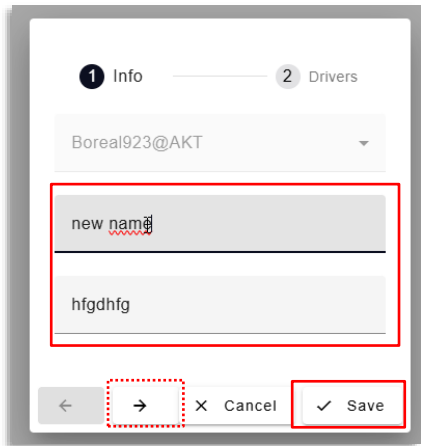
## Edit a Driver Group

9. In the row menu: Select **Edit**.



10. The [edit] driver group menu opens. Edit, **name** or **description**, click on the right arrow to switch to edit the **drivers selection**. See the previous description.

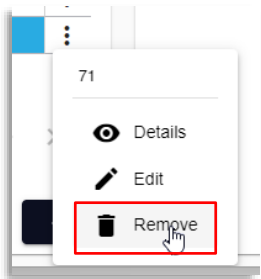
(Note: Company cannot be changed.).



11. Click **Save**.

## Remove a Driver Group

In the row menu, select **Remove**, the group is removed immediately (no confirmation dialogue).

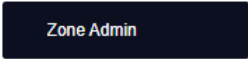




## 12.7 Zone Admin

This section is used for creating and administering zones (geofences). These can have various functionalities in the system, like managing maximum speed within a specific area, setting specific driver coaching thresholds, etc.

The zone functionality depends on the “type” of zone and the specific settings for that zone. Which vehicles will be affected depend on the selected company associated with the zone. Zones can also have specific active times.



### Overview

The zone admin view has two tabs: **Zones**, a list of all zones you have access to, and **Map**, where you view and edit the zones (geography/settings).

### The Zones Tab

Zone tab: All zones listed

Zones

Map

Zone Admin

Id	Name	Type	Company	Description	
Filter	Filter	Filter	Filter	Filter	
139	BC_Victoria_Garage	Coaching	BCT	Bus garage in Victoria	⋮
334	Zone 1	Silent	VolvoPlugin		⋮
335	Zone 2	Coaching	VolvoPlugin		⋮
336	Zone 3	Coaching	VolvoPlugin		⋮
337	Zone 4	Coaching	VolvoPlugin		⋮
340	Zone 5	Coaching	VolvoPlugin		⋮
342	Zone 7	Coaching	VolvoPlugin		⋮
458	Zone 1 Entier	Coaching	Mexico		⋮
908	Test Automation Zone 3	Emission	Volvo test		⋮
929	filpbct	Coaching	BCT		⋮
931	filpbct3 filpbct3 filpbct3	Coaching	BCT		⋮
951	Test 1 first point in route	Emission	Volvo test		⋮
981	SpeedZone Odengatan gatan gatan gatan	Safety	Volvo test	Test	⋮
1004	Jan_test	Safety	Volvo test		⋮
1038	Linnegatan safety safety	Safety	Volvo test		⋮
1060	energy zone runt safety	Emission	Volvo test		⋮
1072	OnlysafetyZone	Safety	Volvo test		⋮
1103	Arendal_Safety40 0444	Safety	Volvo test		⋮
1105	SafetyTestTannaz 25	Safety	Volvo test		⋮
1156	TheTree	Coaching	Volvo test		⋮
1179	water water water	Coaching	BCT		⋮
1182	MAIL_ZONE	Coaching	Volvo test		⋮
1204	Overrev Zone F	Coaching	Volvo test		⋮
1211	safety span spain	Safety	Volvo test		⋮
1229	VBC_TEST_ONVOLVO_TEST_ROUTE	Emission	VBC Test		⋮

Items per page: 25

Page 1 of 4

< >

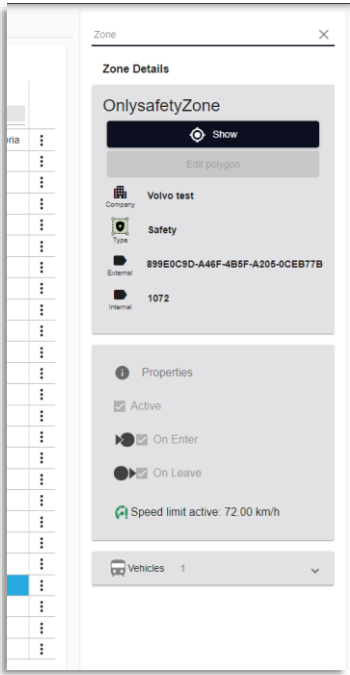
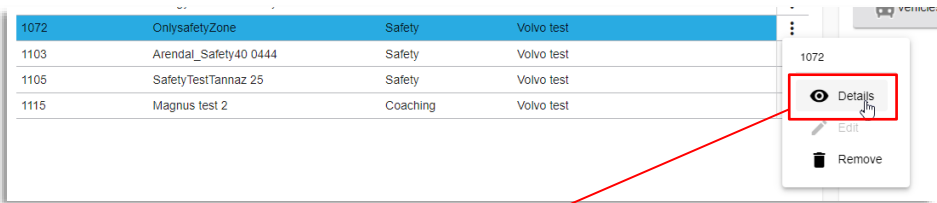
+ Add zone

Header		Description	
Id		Unique zone ID	

Header	Description
Name	The name of the zone
Type	Functionality related zone type.
Company	Company
Description	Free text description of the zone.

Zone Details

Use the row menu to access the Details section:

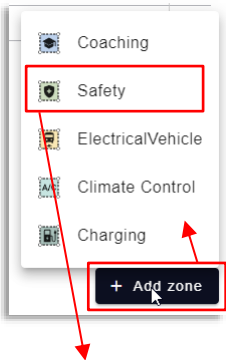


- Show: View the zone on the Overview Map.
- Edit polygon: View and edit the zone geography, and settings on the Map tab.
- Zone information and properties (settings) below. Depending on zone type.
- Active [time] periods, the vehicles affected by the zone, users receiving notification, Routes affected by the zone. (listed in expandable sections)

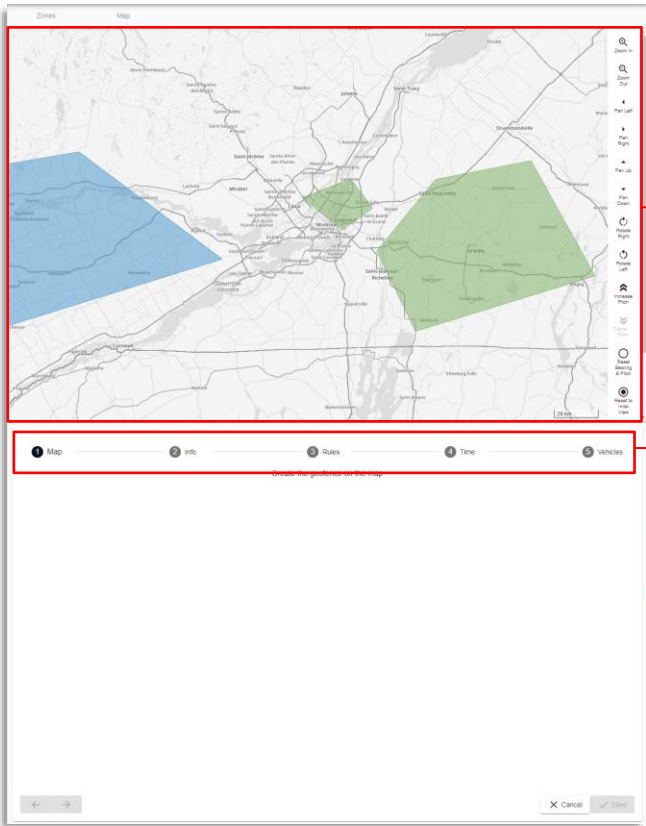
Create a new Zone

Click on the **New Zone** button, a type-menu expands above. Select the type you want to create in the menu. The following zone types can be administered in the current version of Fleet Studio:

Zone Type	Description
Coaching Zone	Coaching zones have two basic functions: First, email notifications to (selected) users whenever a (selected) vehicle triggers a function specified for that particular zone. Secondly, Coaching zones are used for setting local driver coaching thresholds – for instance lowering the “Overspeed” limit on the road outside schools and daycare centres.
Safety Zone	This zone type either monitor the maximum speed inside the zone (warning both driver and traffic controllers when this is exceeded), or it controls the drivetrain to limit the maximum speed to the set value (system/vehicle dependent function).
Electrical Vehicle (Nova-Specific Function)	Nova hybrid vehicle drivetrain modes can be controlled by “EV zones”. These zones offer local drivetrain control for forcing charging or emission-free (battery) running.  The zone functionality can be toggled between “Pre-Charge Zone” functionality and “Battery Zone” functionality.  Set up a pre-charge zone to force the charging of the vehicle batteries ahead of the following battery zone. Set up a battery zone to force electric (no emission) drive inside the zone. Enter the distance the vehicles will be driving inside the battery zone to define how much power will be needed.
Climate Control	Climate zones can either turn on the (passenger) AC inside the zone or turn it off inside the zone. Toggle between these two functions by clicking in the corresponding checkbox. The zone also sets the thermostat temperature.
Charging	Charging zones can trigger notifications to selected users when an electric vehicle enters and/or leaves the zone with SoC (State of Charge) higher or lower than the set percentage value.



A map section, where you define the zone geography, is presented above the create zone step sections, where the zone properties etc. are entered/selected.



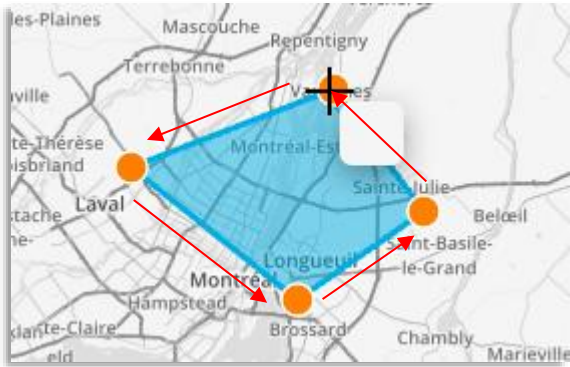
Map: Zoom/pan to where you want your zone. Click to draw the zone.

When the geography is defined in step one, the zone properties are set in the following steps (2-5/6).

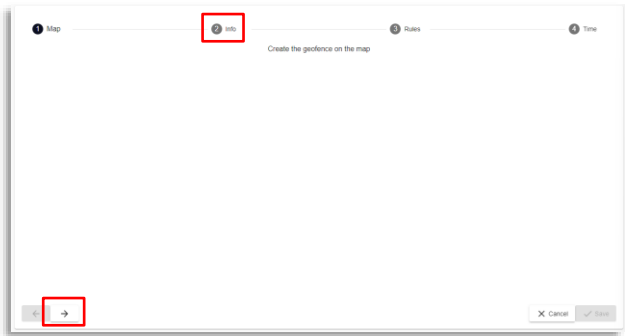
### Step 1, Map: Define zone geography

Zoom and pan the map to where you want to create the zone. (Left) click to place zone points in succession. Click on the starting point to close the zone – it turns **blue to indicate that the shape is closed/completed**.

**Note:** You can click and drag to move placed zone points and add points between existing points by clicking on the zone outline.



Move to the next step with the arrow-buttons, or click on the step directly:



### Step 2, Info: Enter Zone Information

1 Map

2 Info

3 Rules

4 Time

5 Vehicles

6 Users

Choose company

Zone Name

Description

Company menu

- Select the company, whose vehicles are to be affected by the zone in the top menu.
- Enter an easily identifiable zone name.
- And enter a good, logical description of the zone/functionality.

Proceed to the next step.

Step 3, [Zone] Rules: Define the Zone Properties.

Here you define what effect the zone will have in the system. The rules vary with the zone type.

Zone-independent settings

- Check the “Active” box for the zone to have effect in the system.
- Check on enter/leave boxes to report when a vehicle (from the selected company) enters and/or leaves the zone. The users selected in the Users section will receive mail notifications.

Coaching Zones

Coaching

Properties

☒ Active

On Enter

On Leave

limit for excessive idling [s]

speed limit for overspeed[km/h]

limit for overRev [rpm]

harsh acceleration [m/s²]

harsh braking [m/s²]

harsh turning [m/s²]

Property	Description
Limit for excessive idling	Time threshold triggering excessive idling event.
Speed limit for overspeed	Speed threshold. Speed above this triggers Overspeed event.
Limit for overrev [rpm]	Rpm threshold for overrev. Rpm over threshold triggers overrev event.
Harsh acceleration [m/s2]	Acceleration threshold for Harsh acceleration. Acceleration exceeding threshold triggers harsh acceleration event.
Harsh breaking [m/s2]	Deacceleration threshold for Harsh breaking. Deacceleration exceeding threshold triggers harsh breaking event.
Harsh turning [m/s2]	Angular acceleration threshold for Harsh turning. Angular acceleration exceeding threshold triggers harsh turning event.

Safety Zones



Properties

☒ Active

☐ On Enter

☐ On Leave

Safety Speed Active [l]

Safety Speed Passive [km/h]

Property	Description
Safety Speed Active	Set active (physically limiting) speed limit inside the zone. (Vehicle type dependent.) The vehicle will be limited to this speed inside the zone.
Safety Speed Passive	Set passive (reporting/event-generating) speed limit inside the zone. A corresponding event will be generated when exceeding the limit inside the zone.

Electrical vehicle (Nova-Specific Functionality)



This zone type controls the drivetrain in Nova hybrid vehicles, to trigger charging or battery (no emission) use in the zone.

Toggle between Charge zone and battery zone functionality.

EV Zone Type

Charge zone

Distance until full electric

Electrical distance

Battery zone

Full electric distance

Max Speed (km/h)

Property	Description
EV Zone Type Charge Zone	<p>Zone for forcing pre-charging of the battery before entering a battery zone.</p> <p><b>Distance until full electric:</b></p> <p>Enter planned route distance to the next battery/full electric zone, to make sure the battery is charged for electric drive inside that zone.</p> <p><b>Electrical distance (m):</b></p> <p>Enter the route length inside the upcoming battery/full electric zone to determine the battery power needed.</p>
Battery Zone	<p>Zone forcing electric drive.</p> <p><b>Full electric distance:</b></p> <p>Enter the planned driven route length inside the battery zone, where the electric drive is forced.</p> <p><b>Max Speed:</b></p> <p>Forced (drivetrain limited) max speed inside the battery zone.</p>



Climate Control

ClimateControl

Turn on

Turn off

Target temperature[°C]

Toggle between turning the climate control on or off inside zone.

Property	Description
Target temperature (Turn on)	With "Turn on" checked: Set the thermostat target temperature (C).

Proceed to the next step.

Charging

The charging zone triggers notifications to the selected users (step 6) when an electric vehicle enters/leaves the zone with more or less than the set SoC (%). The enter trigger is separate from the leave trigger.

- Activate enter, leave notification triggers with the checkbox to the left of each menu.
- Switch between "more than" and "less than" (set percent SoC) with the ">/<" menu for each trigger.

State of charge enter trigger

Percent

>

50 %

State of charge leave trigger

Percent

<

50 %

More/less than... menu.

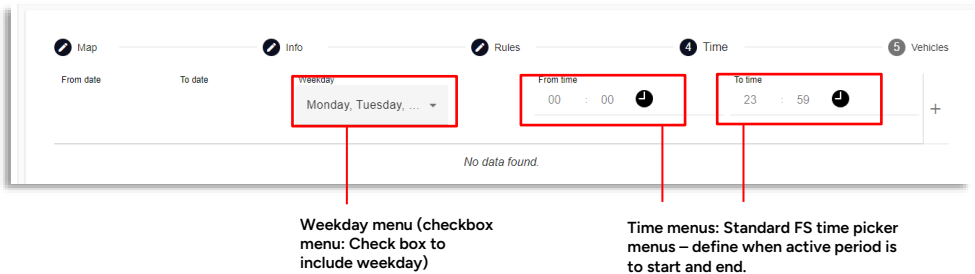
Property	Description
State of charge <b>enter</b> trigger – more than/less than percent	Triggers a notification to select user(s) when the vehicle enters the zone with more/less than the set SoC.
State of charge <b>leave</b> trigger – more than/less than percent	Triggers a notification to select user(s) when the vehicle leaves the zone with more/less than the set SoC.

Proceed to the next step.

### Step 4, Time

In this section, you define when the zone is active/ has effect in the system.

**Note:** This section is under development. You can choose active weekdays and periods but not yet yearly periods (from date to date).

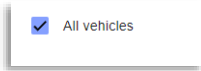


Proceed to the next step.

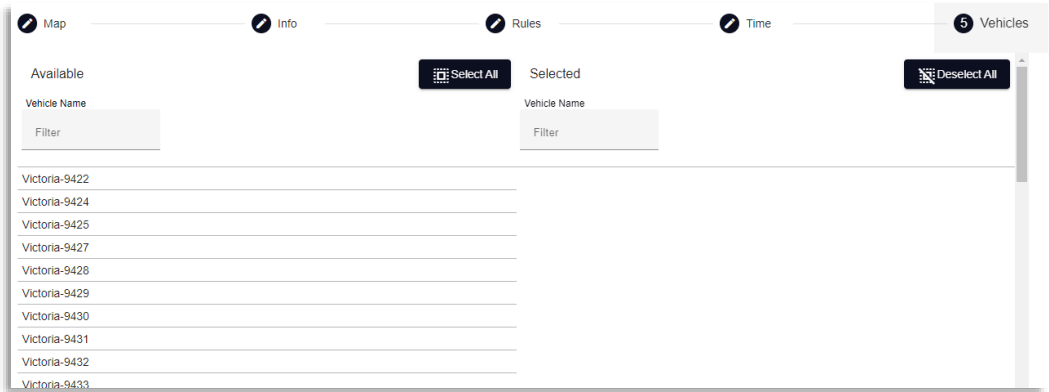
### Step 5, [Affected] Vehicles

In this section, you can select specific vehicles that will be affected by the zone (rules).

**Note:** Check the “All Vehicles” button to include all vehicles. (Any vehicles added in the future will also be affected by the zone.)



Make a specific vehicle selection for the zone to only affect those vehicles. (Vehicles added in the future will not be a part of this selection and will thus not be affected by the zone.):



The selection works just like the report search item selection. The “Selected” list lists all selected items.

Click to move a vehicle from one list to the other or use the “Select all”/”Deselect All”-buttons to move items in that list to the other list.

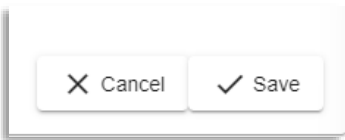
Proceed to the next step.

Step 6, [Notified] Users (zone dependent)

In this section, you select the users that are to be notified according to the zone rules. The selection works just like the vehicle selection, except **only selected users get notifications. If you do not select any user in this step, no one will get a notification triggered by the zone rules.**

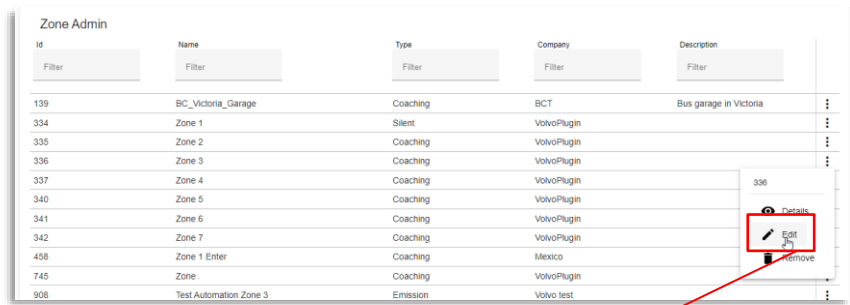
... And Then Save the Zone.

Click on the save button to save the created zone with the entered settings/properties.

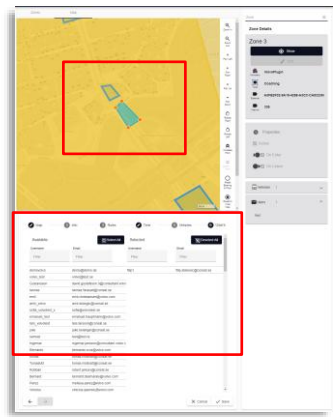


Edit a Zone

- 1. Select **Edit** in the row menu for the zone on the Zones tab.



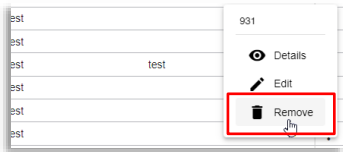
The zone is displayed on the map, together with the zone details section.



- 2. Select the "step" you want to edit. Or click and drag the points on the map to change the zone geography. See the descriptions in the Create Zone section above.
- 3. Click **Save** to save.

## Delete [Remove] a Zone

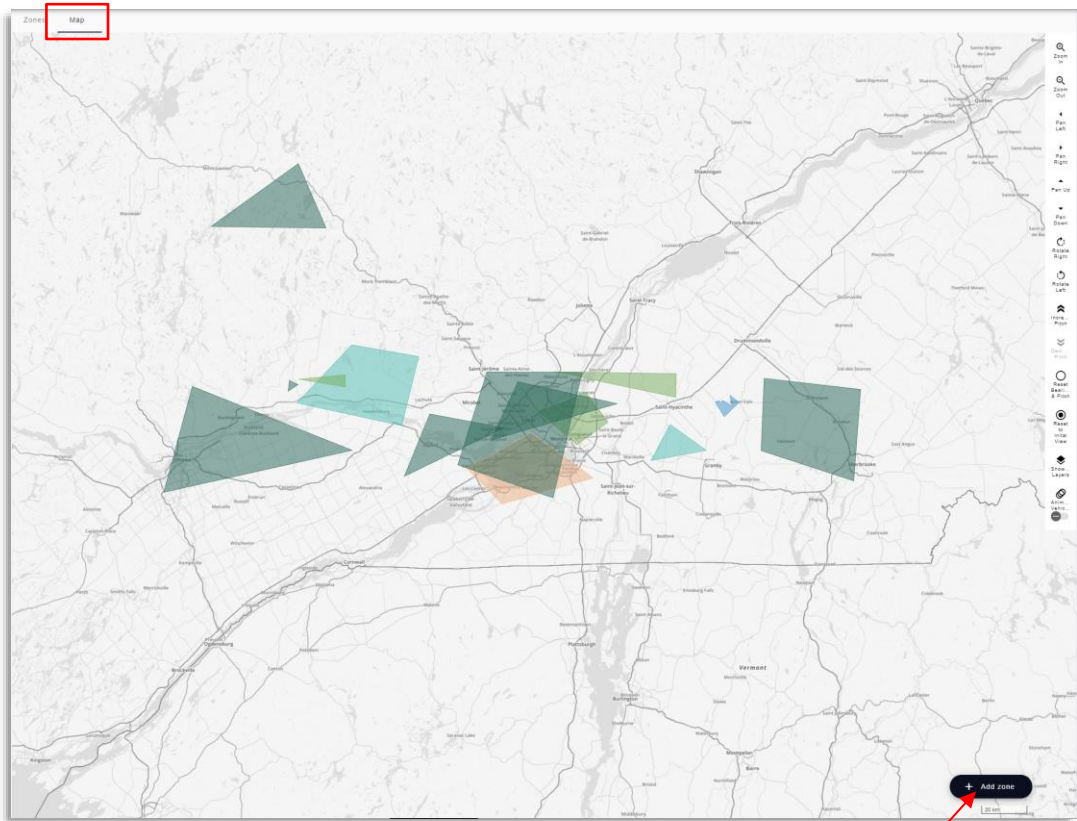
Select **Remove** in the row menu on the Zones tab to remove the zone.



**Note:** If you do not have permission to remove the zone an Error message will indicate this.

## The Map Tab

- Select the Map tab to view your zones on a map.
- A “new zone” button let you quickly access this function from the map view.
- The Zone Admin Map works just like the Overview Map, see chapter 5.2



Add (create) new zone. See the “Create new zone” chapter above.