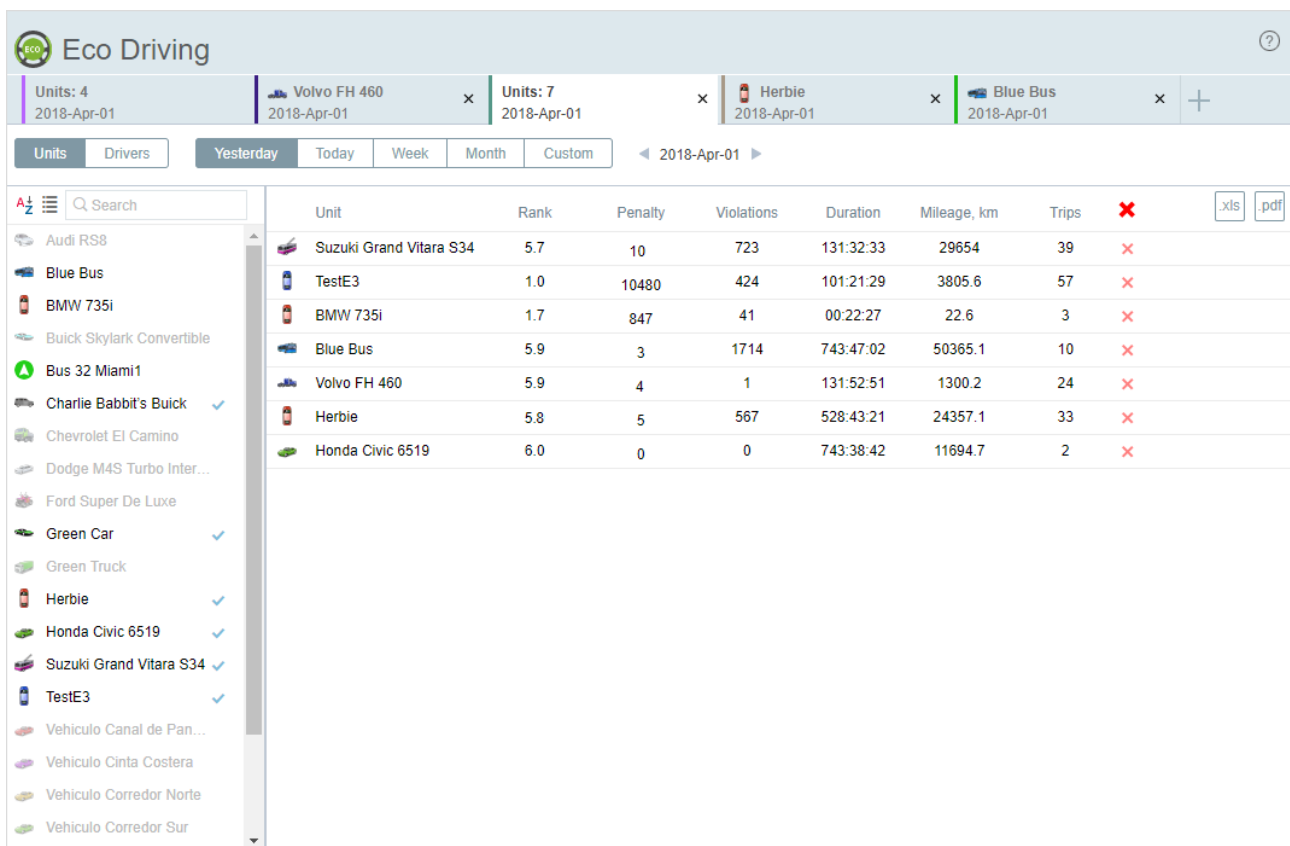


Eco Driving

Eco Driving is an application designed to receive driving quality assessment. The assessment is made on the basis of penalties received for speedings, unreasonable accelerations/brakings/accelerations while cornering, reckless driving, and other violations which can be detected on the basis of created sensors. The analysis of received driving quality data may afterwards help you to prolong vehicle life, reduce fuel costs, ensure cargo safety, and also understand the reason for any case of emergency.

Interface

There are several elements in the application interface: top panel, statistics table (takes central place), work list (to the left of the statistics table), switching between tabs (above).



The screenshot shows the Eco Driving application interface. At the top, there is a header with the 'Eco Driving' logo and a help icon. Below the header is a top panel with tabs for 'Units: 4' (2018-Apr-01), 'Volvo FH 460' (2018-Apr-01), 'Units: 7' (2018-Apr-01), 'Herbie' (2018-Apr-01), and 'Blue Bus' (2018-Apr-01). Below the top panel is a navigation bar with tabs for 'Units', 'Drivers', and a date selector for 'Yesterday', 'Today', 'Week', 'Month', and 'Custom'. The main area is a table with columns: Unit, Rank, Penalty, Violations, Duration, Mileage, km, Trips, and a red 'X' icon. To the right of the table are buttons for '.xls' and '.pdf'. On the left side, there is a sidebar with a search bar and a list of units, including Audi RS8, Blue Bus, BMW 735i, Buick Skylark Convertible, Bus 32 Miami1, Charlie Babbit's Buick, Chevrolet El Camino, Dodge M4S Turbo Inter..., Ford Super De Luxe, Green Car, Green Truck, Herbie, Honda Civic 6519, Suzuki Grand Vitara S34, TestE3, Vehiculo Canal de Pan..., Vehiculo Cinta Costera, Vehiculo Corredor Norte, and Vehiculo Corredor Sur.

Unit	Rank	Penalty	Violations	Duration	Mileage, km	Trips	X
Suzuki Grand Vitara S34	5.7	10	723	131:32:33	29654	39	X
TestE3	1.0	10480	424	101:21:29	3805.6	57	X
BMW 735i	1.7	847	41	00:22:27	22.6	3	X
Blue Bus	5.9	3	1714	743:47:02	50365.1	10	X
Volvo FH 460	5.9	4	1	131:52:51	1300.2	24	X
Herbie	5.8	5	567	528:43:21	24357.1	33	X
Honda Civic 6519	6.0	0	0	743:38:42	11694.7	2	X

Request Formation

The time interval for which you would like to receive driving quality assessment should be indicated in the top panel. There are two variants available: established (Yesterday, Today, Week, Month) and adjustable interval (Custom) where any dates could be set. By clicking Previous/Next arrows an established interval is changed back or forth for a day, week, or month, correspondingly.

The work list is situated on the left and can consist of units or unit groups. The switching between the modes is done using the button /. By default, the work list is sorted by names arranged in direct alphabetic

order. The order can be reversed. To do so, use the switch button / in the header. To find a unit or unit group quickly, use the dynamic filter above the list.

The selection of units (unit groups) is done using the arrow shaped button opposite to their names or by double clicks. The chosen units will be added to the table where the assessment will be automatically made. The following data is shown in the table: total amount of scored penalty points (driving quality assessment), number of violations, total duration, mileage, as well as number of trips for the chosen interval. The resulting table can be filtered by any of the indicated criteria (click a necessary one). The units added to the table are marked by flags in the list. A unit can be deleted from the resulting table along with all statistics data (deleting button in the last column of the table).

Driving Quality Assessment Parameters

As mentioned before, there is a set of parameters for a driving quality assessment: speeding, acceleration, braking, acceleration while cornering, reckless driving, and also custom parameters depending on chosen sensors. These parameters should be chosen on Eco Driving tab of a unit properties dialog. Moreover, the amount of penalty points is indicated for each violation. Finally, the application converts the penalty points into a rank (6 point scoring system assessment). The following algorithm is used:

- 0 points — a rank of 6.0;
- from 0 to 20 points — a rank of 5.9;
- from 20 to 50 points — a rank of 5.0 to 5.9;
- from 50 to 100 points — a rank of 4.0 to 5.0;
- from 100 to 200 points — a rank of 3.0 to 4.0;
- from 200 to 500 points — a rank of 2.0 to 3.0 ;
- more than 500 points — a rank of 1.0 to 2.0.

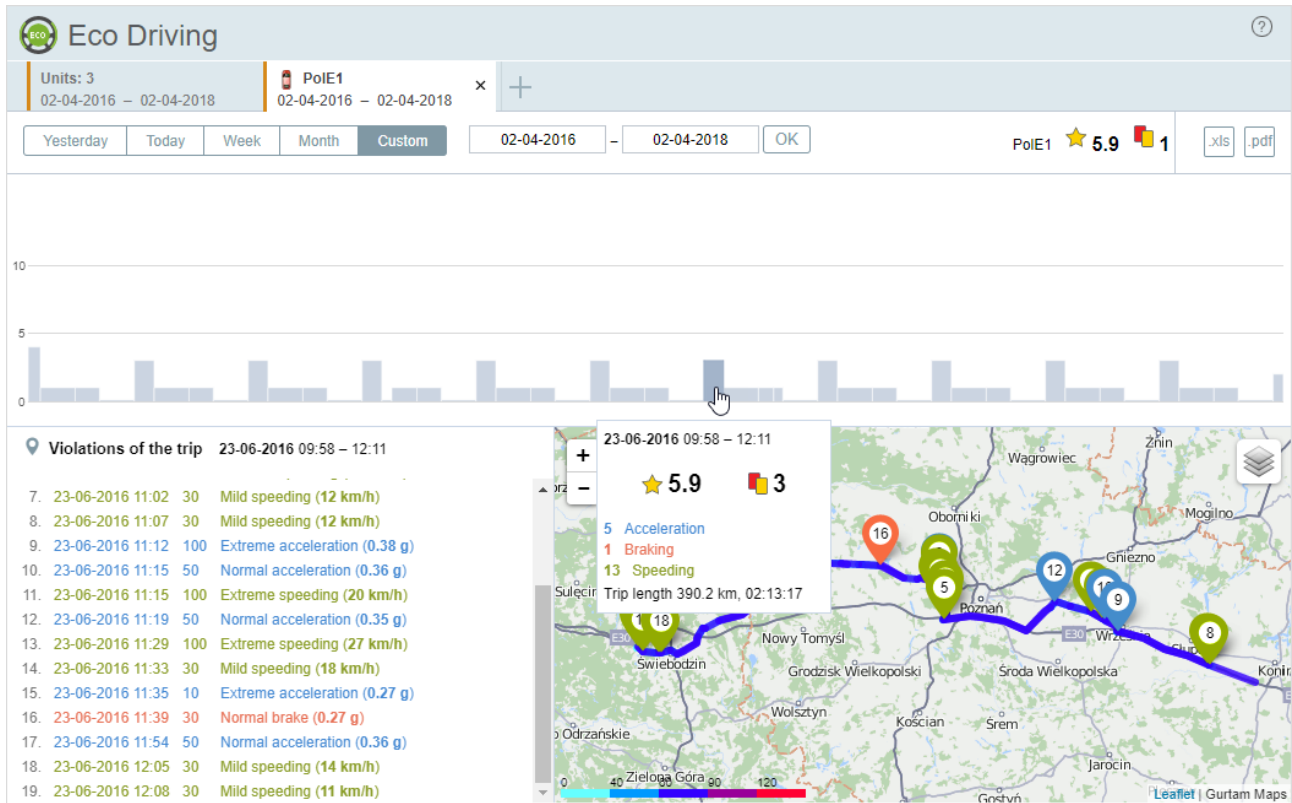
Trips Analysis

After the evaluation is made and the driving quality assessment (rank) is received there is a possibility to go into details of the assessment by clicking a unit's line in statistics table. After clicking it, you can see the following interface: trips (at the top of the screen), the map (a bit below), the violations table (to the left of the map).

Trips are displayed as columns. The width of the column is a ratio of a time spent in trip to the time of all the trips of a chosen interval. The height of the column is a driving quality score (to the left there is a scale with minimum and maximum penalty value on a chosen interval). Point the cursor on a column, and a tooltip containing the following information appears: date of a trip, time interval, mileage, duration, number of penalty points scored, rank, as well as number and type of the violations in a trip.

Click a trip's column in order its track to be displayed on the map. Track color depends on the unit speed (in the bottom left corner of the map there is a scale which indicates speed and its color). Violations on the track are shown by markers.

A list of violations made in a trip is shown on the left. The list is presented as a table and includes the following data: trip date, duration, type of violation and value of penalty points scored for it, and violation's value itself. Click a violation's marker on the map in order to highlight a corresponding line in the list.



Data Export

This option allows you to export unit or unit group data to a file. Two formats are supported: XLS (Excel) and PDF. To export the unit group data, press [.xls](#) / [.pdf](#) (in accordance with the required format) in the header of the table to the right of the Clear list (**✖**) button.

To get a file with the data about one unit, hover over the required unit and click on the button that appears at the end of the line. You can also export the data from the tab with the extended information about the unit. To do it, click on the corresponding button in the upper right corner of the work area.