



iQsan Vehicle Cloud Service Manual

(For Users)



- Thank you so much for using iQsan Vehicle Cloud Service.
- You must read this manual thoroughly before using this unit.
- After you have finished reading this manual, please keep it handy for ready reference.
- This manual is intended for the trainees.

Please note:

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9. The content of following display box in this Instruction Manual is a note that is important for you to be able to use this product properly.
10. About PC (computer) mediated environment
This site is based on the Web system that uses the Internet to provide services.
Available for a Web browser (Google Chrome or Internet Explorer).
For the trouble-free operation of using the site, the following requirements are recommended.

Web browser requirements

Google Chrome (recommended):

Please use the latest version available. (By default, Google Chrome is configured to auto-update to its latest version at the restart. However, you can check the version by clicking the Google button in the upper right-hand corner of the screen. If the button is displayed in Grey: The latest version is installed, if displayed in Green or Red etc.: You need to update your version of Chrome. Please restart Chrome)

Internet Explorer (IE): Version 11 or later.

Operating System (OS)

*Windows: Please use Windows 7 (SP1) or later.

*Mac: Please use Mac OS X 10.6 or later.

Web browser settings

* This site uses JavaScript. JavaScript is enabled by default. However if disabled, please enable JavaScript in your browser settings.

* We use a pop-up display at this site. If a pop-up warning is displayed, "Always display" should be selected.

PC Screen Resolution

We recommend to use WXGA (1280x768, 1280x800, 1366x768) or higher resolution.

Touch Panel

This site is not compatible with touch panel. Please turn off the touch panel function of the display.

Printer

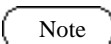
This site relies on the Web browser of PC and the printer driver available and therefore does not guarantee the printing on all the printers. You may need to change the print option of the Web browser and/or the property of the printer driver.

Internet connection

This site relies on the internet access services that are contracted by the users.

We recommend to use the 1 Mbps or faster connection speed.

Depending on the type of the connection line, your area and the number of the connections, the speed may be significantly reduced, possibly causing a stressful experience in your PC operation. Especially if you are using a DSL (ADSL) connection, please consult with your Internet Provider or Telephone company.

Symbol		This symbol indicates that this product may malfunction if it is handled improperly, or else shows general notes.
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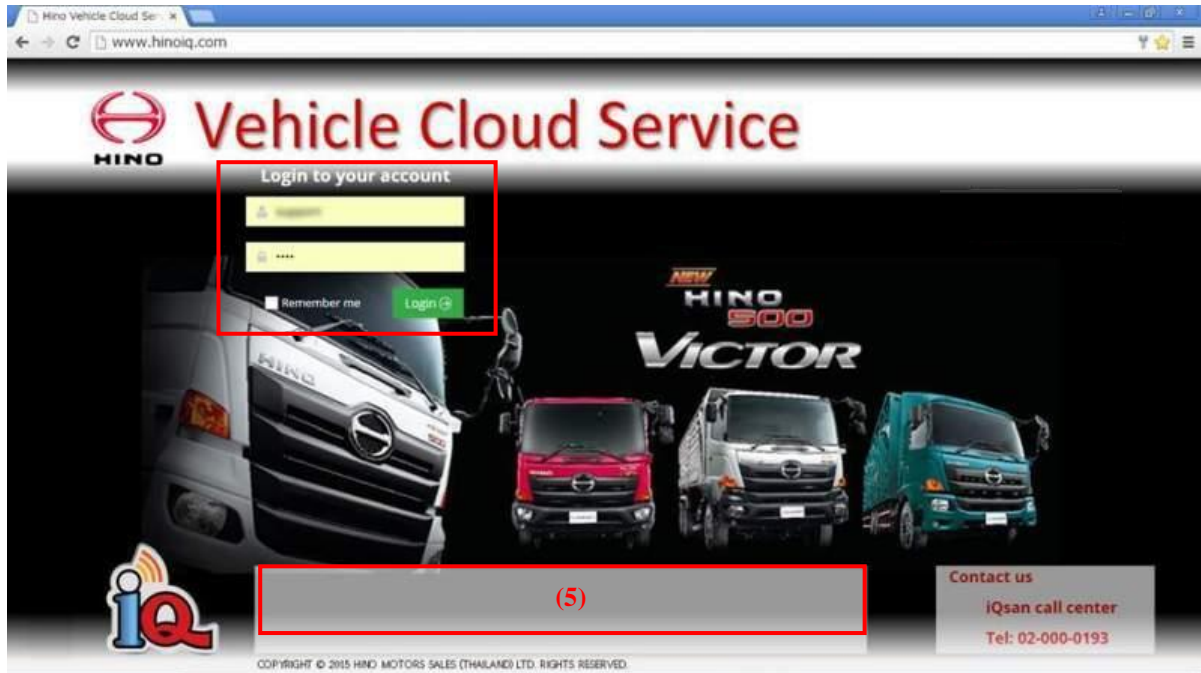
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1 Each Function Setting

1.1 Login

This is displayed for you to login to the system.



(1) User Name

This is used to enter the user name used at the time of logging in.

(2) Password

This is used to enter the password used at the time of logging in.

(3) Entered Content Retention Check (Remember me)

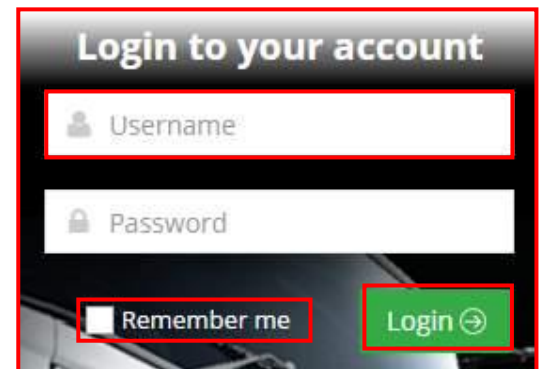
This is used to retain the login and password information.

(4) Login Button

Click the Login button to login to the system.

(5) Information Box

If there is information, etc. available, it will be shown in this box.

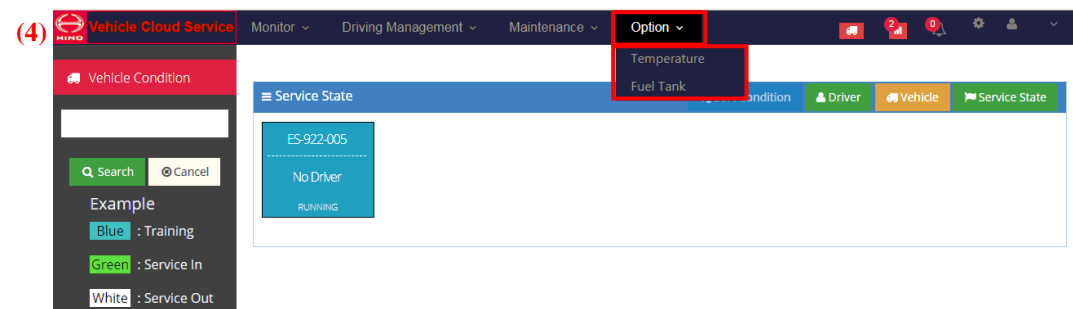
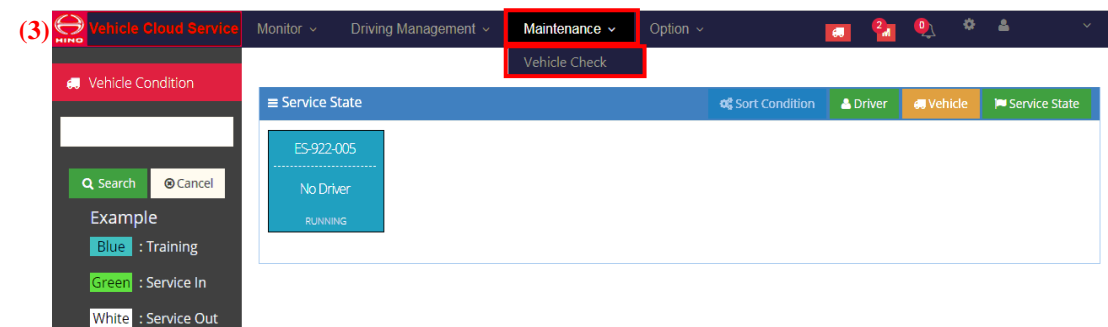
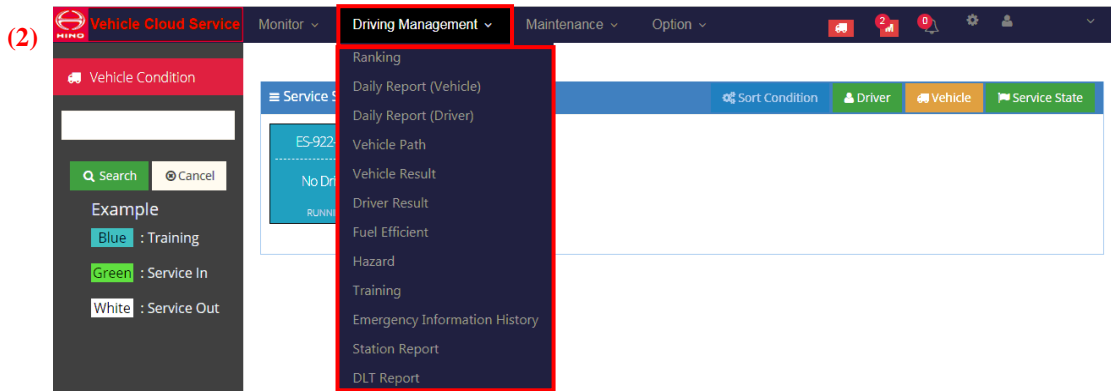
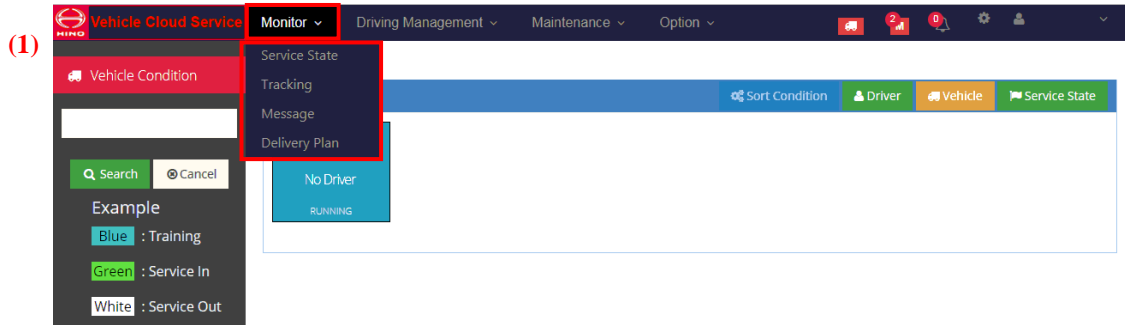


* A login ID and password will be issued from the Support Center.

Note

Please keep your login ID and password confidential.

2 Menu



- (1) [Monitor]
- [Service State]
 - [Tracking]
 - [Message]
 - [Delivery Plan]

- (2) [Drive Management]
 - [Ranking]
 - [Daily Report (Vehicle)]
 - [Daily Report (Driver)]
 - [Vehicle Path]
 - [Vehicle Result]
 - [Driver Result]
 - [Fuel Efficient]
 - [Hazard]
 - [Training]
 - [Emergency Information History]
 - [Station Report]
 - [DLT Report]

- (3) [Maintenance]
 - [Vehicle Check]

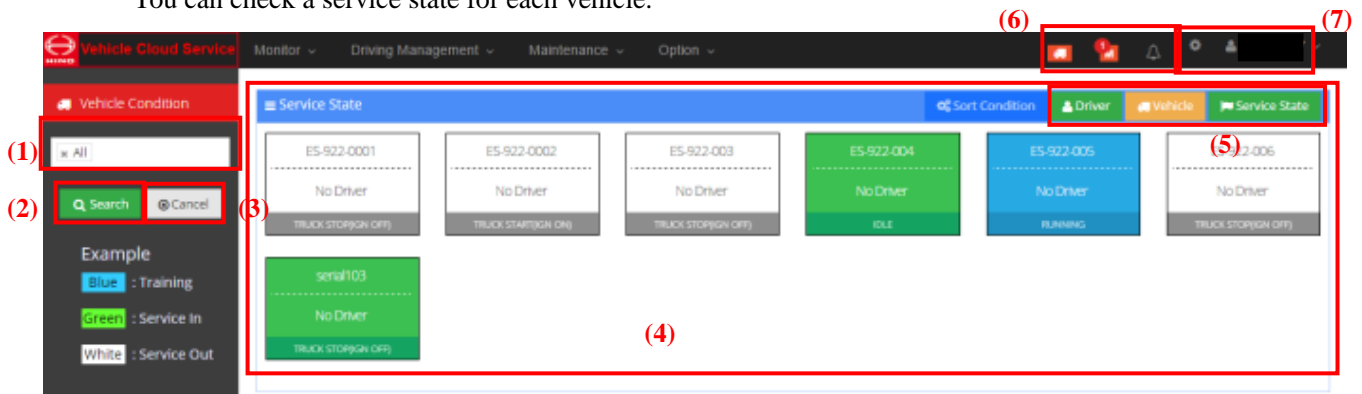
- (4) [Option]
 - [Temperature]
 - [Fuel Tank]

Note

Please ensure to log out, if not used for long periods of time.

2.1 Services State

You can check a service state for each vehicle.



(1) Vehicle Search

This is used to select the search criteria for vehicles.

Selections are: Select All, Training, Service-IN, and Service-OUT.

(2) Search Button

This is used to start a vehicle search.

(3) Cancel Button

This is used to abort the vehicle search.

(4) Vehicle Status Display

The following information is displayed.

- Vehicle Name
- Driver Name
- Vehicle status (Green: Service-IN, White: Service-OUT, Dark Blue: Training)

If you click a vehicle to browse details about it, the Details screen will appear.

(5) Sort Button

The items can be sorted in the Vehicle Status Display screen in the content you select.

- [Driver Name]
- [Vehicle Name]
- [Vehicle Status]

(6) Various Information Display

The following information will be displayed in the menu bar.

- [Station Report Button] : This is used to shift to the Station Report screen.
Station Reports created in the last 24 hours will be displayed.
- [Maintenance Alarm Button] : This is used to shift to the Vehicle Check screen.
The number of vehicles to which notification of component replacement is given will be displayed in the button.
- [Emergency Information Button] : This is used to display Emergency Information list.
The number of the unread Emergency Information will be displayed in the button.

(7) Setting Button and Logout Button

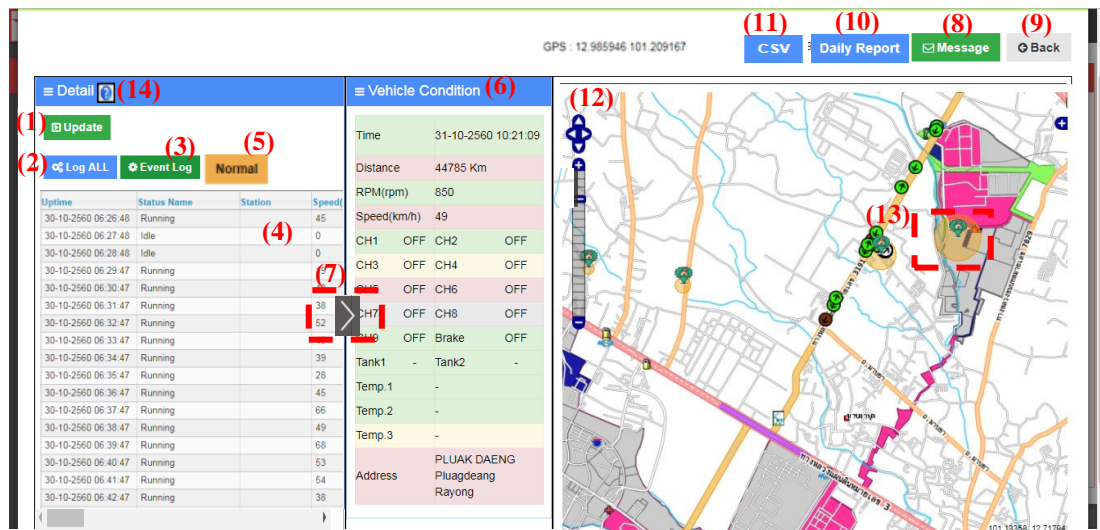
- [Setting Button] : This is used to shift to the Setting screen.
For more details of the Setting screen, refer to the Section 3, Setting.
- [Download Button] : This is used to download the manual.
- [Logout Button] : This is used to logout the system.

Note

For the vehicle to which no driver has been assigned, indicate as "No Driver".

2.1.1 Vehicle Detail Screen

You can check the detailed information of the vehicles.



(1) Update

This is used to update the selected vehicle data to the latest version. (All the information in the screen)

(2) Log ALL

This is used to display all the Log data of the vehicle selected on list (4). (Data of every minute)

(3) Event Log

This is used to display all the Event Logs of the vehicle selected on list (4).

(4) Log Information

This table summarizes all the log (including event logs) information of the vehicle selected.

Event data from the service start time will be displayed.

Event data of vehicles which have already finished service can be checked via the Vehicle Path.

(5) Icon Type

The button is displayed only for regulated vehicles (dangerous goods transport vehicles and trailer vehicles).

The color of the icons on the map when over speed occurs or legal speed over can be changed.

– Normal

The icons are displayed in yellow only when over speed occurs.

The icons are displayed in red only when legal over speed occurs.

– Over Speed

All icons are displayed in yellow while over speed continues.

All icons are displayed in red while legal over speed continues.

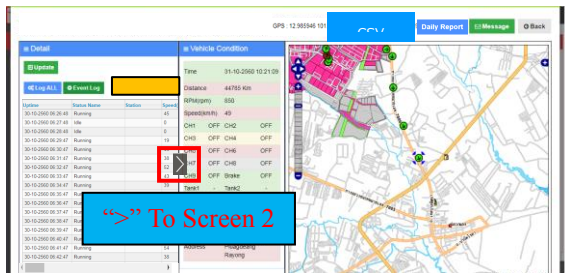
(6) Vehicle Status

The detailed condition of a vehicle is shown when selected in Log information (4) and Map (12).

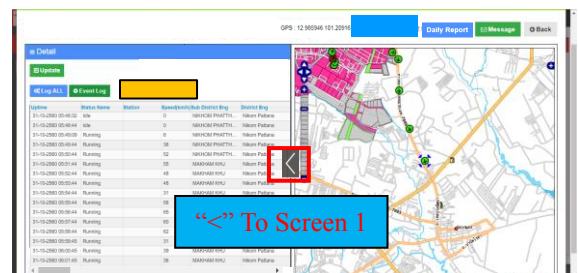
(7) Change screen size

The size of the Vehicle Detail screen can be changed.

【Screen1(default screen)】



【Screen2, list, map screen】



(8) Message Button

This is used to open the Send Message screen for the vehicle selected.

(9) Back (Reverse) Button

This is used to return to the Service State.

(10) Daily Report

Pressing this button will shift to the Daily Report screen of the vehicle selected.

(11) CSV Export

This is used to output all Log Information in a CSV file.

(12) Map Display

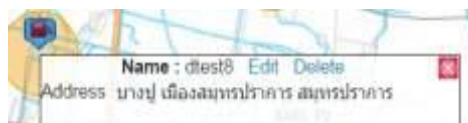
The log data in (4) is presented on the map

(13) Station Icon and Area Display

Displays a Station icon and an area on the map.



When clicking an icon on the map, name and address of the Station, Edit button, and Delete button will be displayed.



(14) Icon Example Button

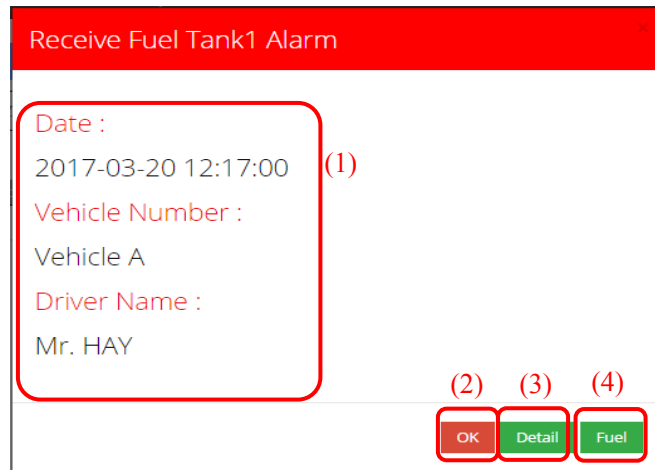
Display description of the vehicle icon of each color on the map.

2.1.2 Emergency Pop-up Screen

When data with the pop-up setting enabled is received, the Emergency Pop-up will be displayed.

For pop-up settings, refer to (12) Emergency information - Display Item Selection of the Section 3.1, Display Setting.

<Emergency Information Pop-up Screen(Fuel Tank Alarm)>



(1) Items displayed in the pop-up screen

The following information will be displayed.

- Date and time of alarm generation
- Displays the Vehicle name
- Driver name

(2) OK Button

This is used to close the pop-up window.

The number of the unread Emergency Information will be decreased.

(3) Detail Button

This is used to close the pop-up window.

The number of the unread Emergency Information will be decreased.

The Vehicle Detail screen will be displayed.

For the Vehicle Detail screen, refer to the Section 2.1.1.

(4) Fuel Button

This is used to close the pop-up window

The number of the unread Emergency Information will be decreased.

The Fuel Tank screen will be opened.

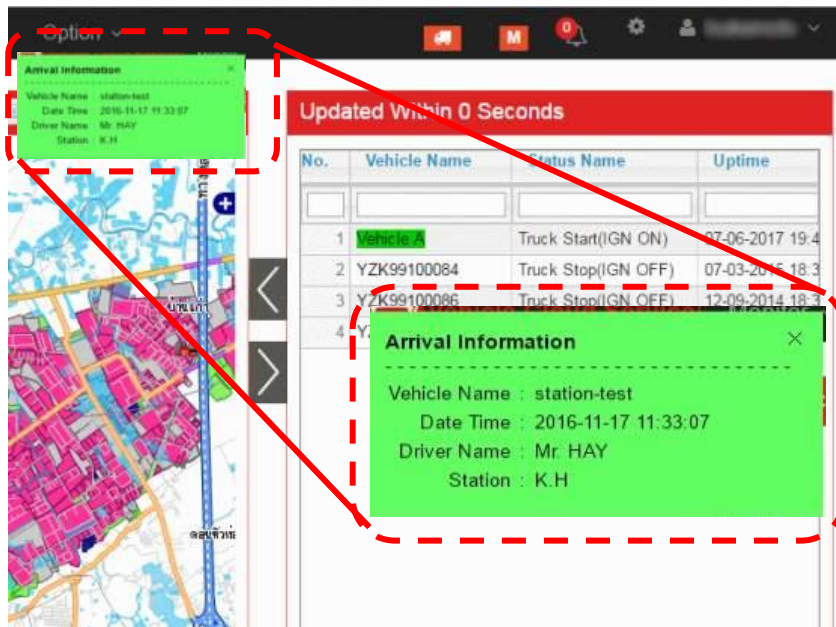
Refer to 2.18 for the Fuel Tank screen.

2.1.3 Station Pop-up screen

When a vehicle arrives in the Station with the pop-up settings enabled, the Station pop-up will be displayed.

For the Station pop-up settings, refer to (5) Station Notification Setting of the Section 3.2, Driving Management.

< Station Pop-up Screen >



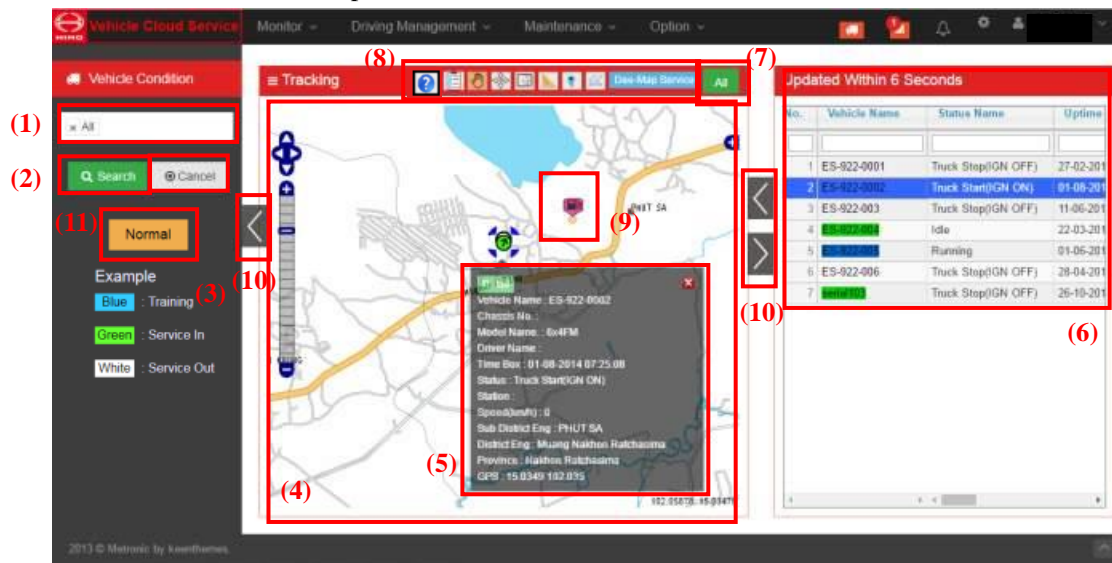
(1) Items displayed in the pop-up screen

The following information will be displayed.

- Displays the Vehicle name
- Date and time of arrival at the Station
- Driver name
- Station name

2.2 Tracking (Vehicle Tracking)

You can check the current position of the vehicle selected and the vehicle status.



(1) Vehicle Search

This is used to select the search criteria for vehicles.

Selections are: Select All, Training, Service-IN, and Service-OUT.

(2) Search Button

This is used to start the search by the vehicle status for the vehicle that you want to search.

(3) Cancel Button

This is used to abort the vehicle search.

(4) Vehicle Position Display

The position of the vehicle selected is shown on the map.

* The display status is updated every time data is received.

When clicking a vehicle mark, the vehicle detailed information in (5) will be displayed.

(5) Detailed Information

The list shows the following information.

- Vehicle Name
- Chassis Number
- Model Name
- Driver Name
- Time Box
- Vehicle Status
- Station Name
- Speed
- Address(Sub Distinct, Distinct, Province)
- GPS(Latitude, Longitude)

(6) Vehicle Status List Display

The search results are listed up.

The list shows the following information.

*The settings of display items and a display order can be changed.

For more details, refer to (10) Tracking Display Items of the Section 3.1 Display Setting.

- Vehicle Names
- Status Name
- Uptime
- Station Name
- Speed
- Address(Sub Distinct, Distinct, Province)
- Driver Name
- Driver Type
- Driver No.
- Temperature ch1,ch2,ch3
- GPS(Latitude, Longitude)
- Fuel Tank1,Tank2
- Over Speed

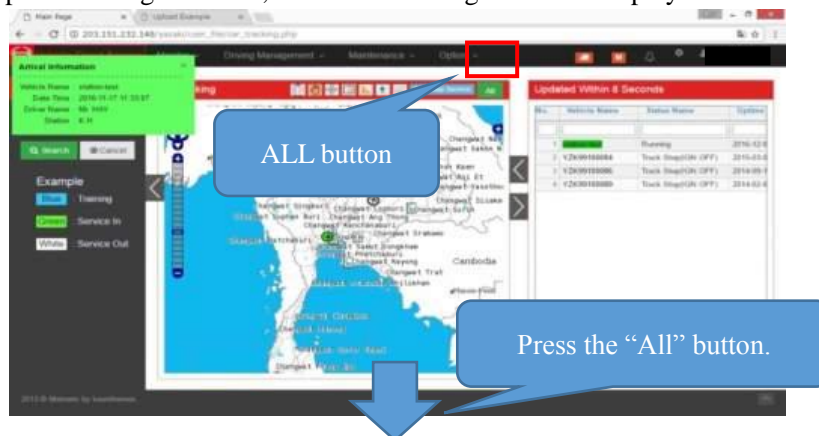
If you select a line to browse the details, the Vehicle Position Detail screen will appear.

(7) ALL button

This is used to restore the map screen to the whole image display.

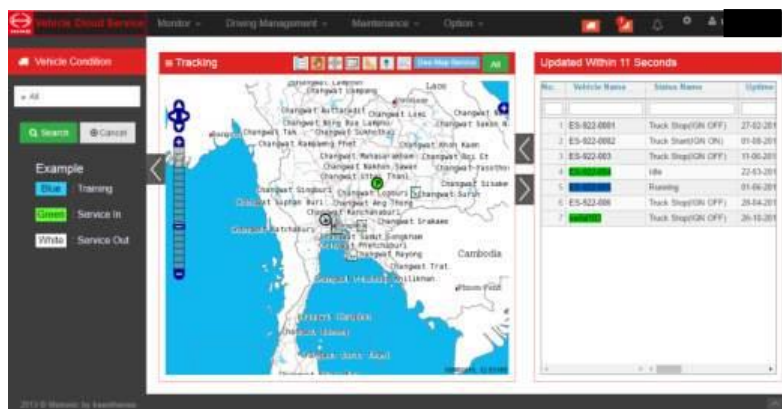
The vehicle is deselected.

*Upon selecting a vehicle, the vehicle is magnified and displayed.



*The map is back to the whole image display.

*The vehicle is deselected.



Note

Depending on the status of mobile communication (outside the communication range), there may be a case in which the display of the vehicle information may be delayed.

(8) Map Option Button

The following functions can be used on the map.

- Vehicle Name Display Button: Displays a vehicle name on a vehicle icon on the map.



- Map Move Button: Moves the display position of the map by dragging.



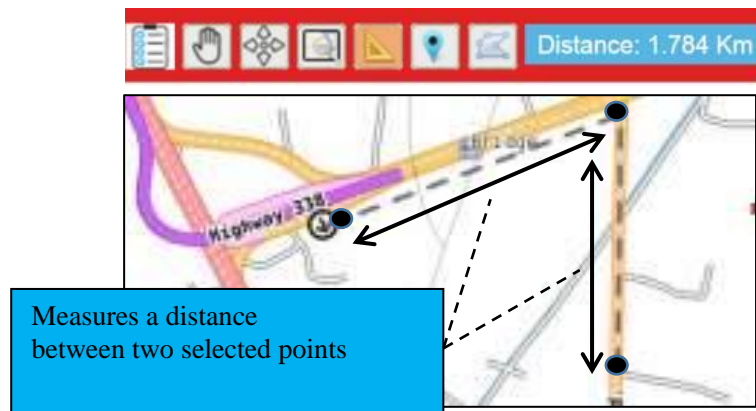
- Cancel Button: Cancels an optional function currently in use.



- Area Zoom Button: Zooms in a selected area on the map.



- Distance Measuring Button: Measures a distance between two selected points on the map.



- Add Station Button: Adds a Station on the map by clicking its position.
The Add Station screen will be displayed.



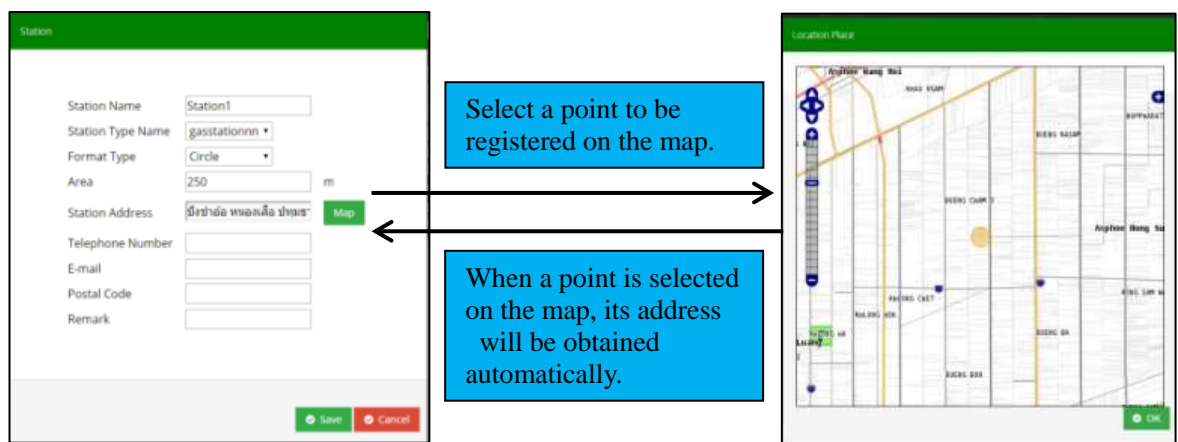
- Add Station Polygon Button: Adds a Station Polygon on the map by clicking its position.
The Add Station screen will be displayed.



- Icon Example Button: Display description of the vehicle icon of each color on the map.



<Add Station Screen>



Enter the following information in the registration screen.

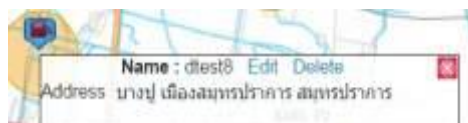
- ✓ Station Name
- ✓ Station Type Name
- ✓ Format Type *Select a circle or polygon.
- ✓ Area *Enter this column when a Format Type is a circle.
- ✓ Station Address
- ✓ Telephone Number
- ✓ E-mail
- ✓ Postal Code
- ✓ Remark

(9) Station Icon and Area Display

Displays a Station icon and an area on the map.



When clicking an icon on the map, name and address of the Station, Edit button, and Delete button will be displayed.



(10) Changing a screen size

Arrangement of the tracking screen can be changed.

【Screen1(default screen)】

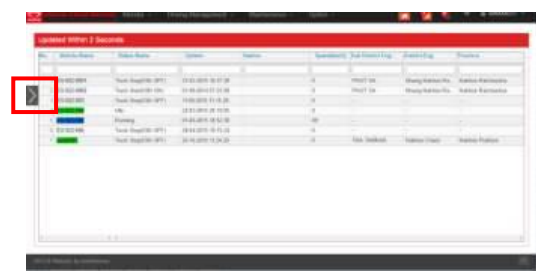


“<” To Screen 3

“>” To Screen 4

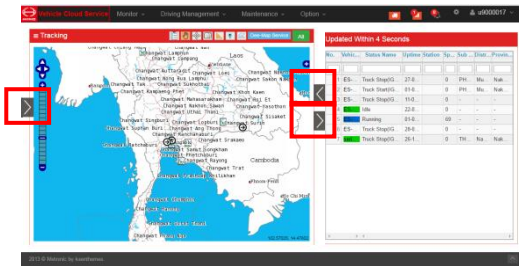
“<” To Screen 2

【Screen 2, list screen】



“>” To Screen 3

【Screen 3 map, list screen】



“>” To Screen 1

“<” To Screen 2

“>” To Screen 5

【Screen 4 map, search screen】



“<” To Screen 5

“<” To Screen 1

【Screen 5, map screen】



“>” To Screen 4

“<” To Screen 3

(11) Icon Type

The button is displayed only for regulated vehicles (dangerous goods transport vehicles and trailer vehicles). The color of the icons on the map when over speed occurs or legal speed over can be changed.

– Normal

The icons are displayed in yellow only when over speed occurs.

The icons are displayed in red only when legal over speed occurs.

– Alarm

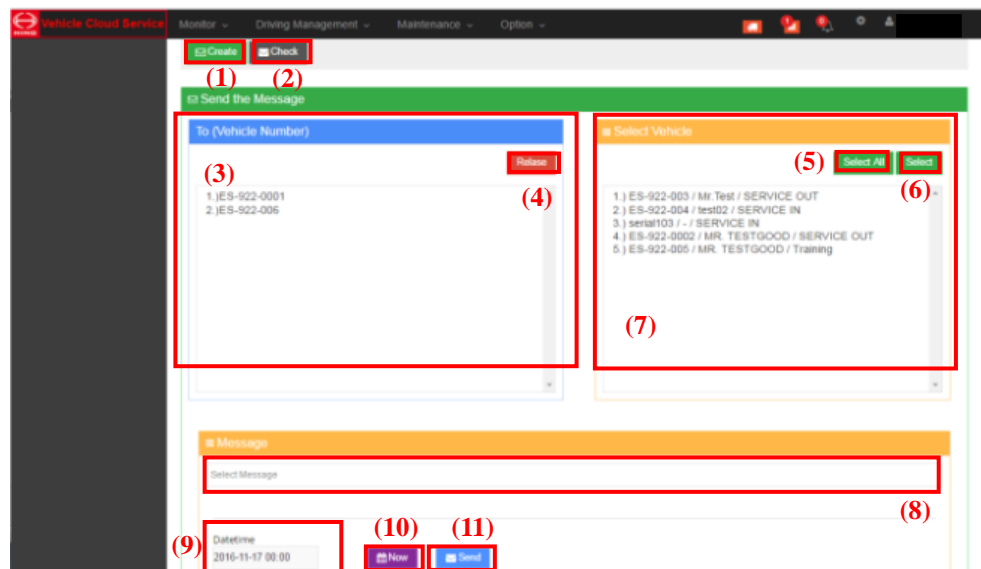
All icons are displayed in yellow while over speed continues.

All icons are displayed in red while legal over speed continues.

2.3 Send Message

2.3.1 Send Message

This is used to send a message to the vehicle(s).



(1) Create Mail Button

This is used to shift to the Send Message screen (this screen) from the Check Message screen.

(2) Mail Check Button

This is used to shift to the Send Message screen.

(3) Send Vehicles Check List (Send List)

This is used to select the vehicles to which you want to send a mail from Search Results (7), as well as display the selection by using buttons (5) and (6).

(4) Release Button

This is used when deleting the vehicles from the send vehicles list.

Selecting the vehicles that you want to delete from the Send Vehicles Check list (Send List) as well as pressing this button will move the selected vehicles to Search Results (7).

(5) Select All Button

This is used to move all the vehicles of Search Results (7) to the Send Vehicles Check List (Send List).

(6) Select Button

This is used to select vehicles in Search Results (7) one at a time (Shift+click will allow multiple selection), as well as for moving the selected vehicles to the Send Vehicles Check List (Send List).

(7) Search Results List

The vehicles searched in the search results are listed up.

(8) Create Message Box

This is used to create the message you want to send. Up to 40 characters can be entered.

The message you want to send can be selected in the pull-down menu.

(9) Send Time Setting

The time to send a message (year / month / date / hour / minute) can be specified.
(A minute can be changed in steps of 5 minutes.)

(10) Current Time Button

This is used to set the time to send a message to the current time (PC system time).

Although the time when this button is pressed will be shown on the display, the time when the [Send] button is pressed will be used to send the messages.

(11) Send Button

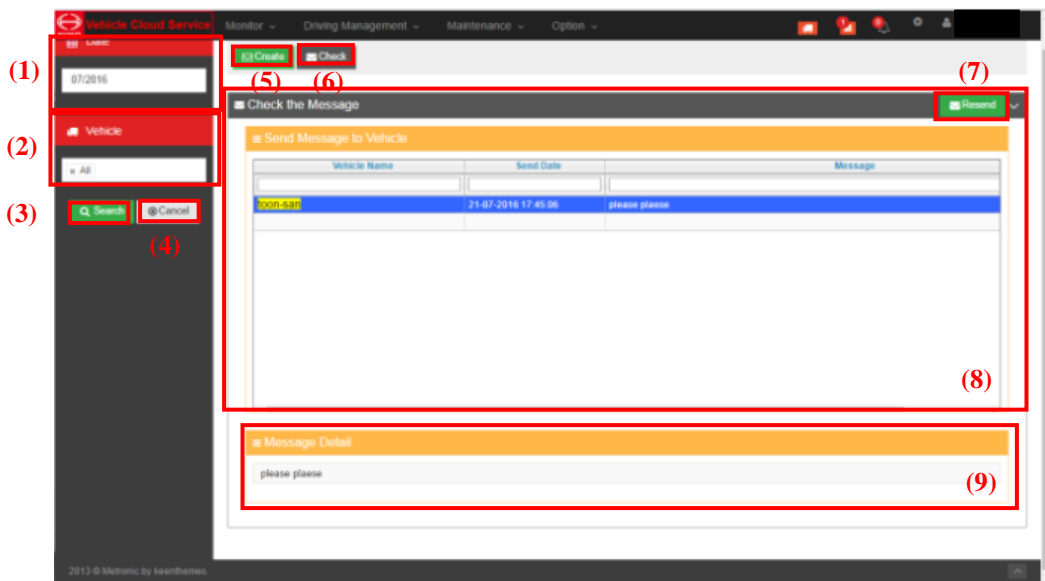
This is used to send a message to the specified vehicles.

Note

No transmission is allowed when the vehicle status is "Service-OUT".

2.3.1 Message Check

You can check the messages sent to the vehicles.



(1) Date Search

This is used to select the search criteria by date.

(2) Vehicle Name Search

This is used to select the search criteria for vehicles.

Selections are: Select All, Training, Service-IN, and Service-OUT.

(3) Search Button

This is used to start a search.

(4) Cancel Button

This is used to abort the search.

(5) Create Mail Button

This is used to shift to the Send Message screen from the Check Message screen.

(6) Mail Check Button

This is used to shift to the Check Message screen (this screen) from the Send Message screen in (8).

(7) Re-send Button

This is used to resend the items selected from Sent List (8).

By pressing this button, the selected message will be reflected on the Check Message screen.

(8) Sent Message List

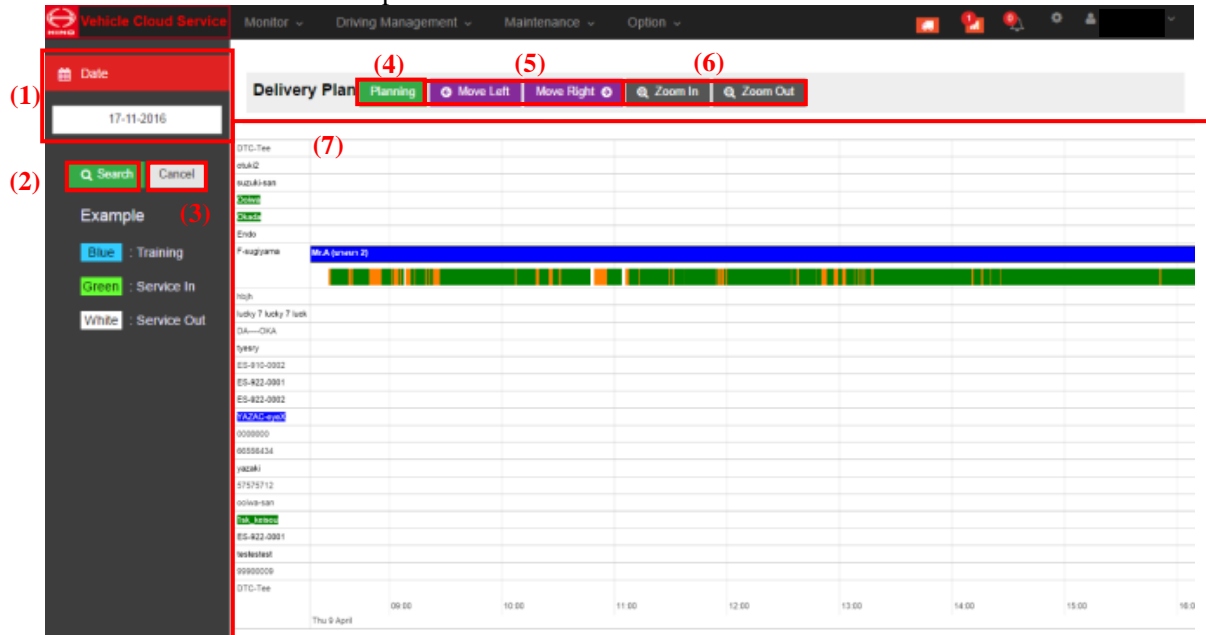
The sent messages searched in the search window are listed up.

(9) Message Detail

The message contents selected from Sent Message List (8) are displayed.

2.4 Delivery Board and Training Plan

You can check the service plan and actual.



(1) Date Search

This is used to select the search period (year, month and date).

(2) Search Button

This is used to start a search.

(3) Cancel Button

This is used to abort the search.

(4) Add Plan Button

When pressing this button, the Create Plan window will appear.

(5) Move Buttons

These buttons are used to move the dispatch board to either left or right so that it can be easily browsed.

(6) Zoom Buttons

These buttons are used to enlarge or reduce the size of the dispatch board so that it can be easily browsed.

(7) Dispatch Board (Plan and Actual) Display

The vehicle status is displayed in different colors.

- Service-IN: Green
- Service-OUT: White
- Training: Dark Blue

Furthermore, when you select the location where a plan is in place, the plan content will be displayed.

The screenshot shows the 'Vehicle Cloud Service' interface with a 'Delivery Plan' section. The 'Planning' form is highlighted with a green header and contains the following elements:

- (8) Start Date, Time: 2015-5-17 00:00 (with a calendar icon)
- (9) End Date, Time: 2015-5-17 23:59 (with a calendar icon)
- (10) Vehicle Name: Select Vehicle (pull-down menu)
- (11) Driver Name: Select Driver (pull-down menu)
- (12) Station Name: Select Distribution (pull-down menu)
- Station Address: Distribution address (text input)
- Add Station (button)
- (13) Submit (button)

The 'Plan Detail' modal on the right shows the following information:

- Vehicle Name: F-sugiyama
- Driver Name: Mr.A
- Start Time: 2015-04-09 08:00:00
- End Time: 2015-04-09 17:00:00
- Distribution Place: มทวณ 2
- Distribution Address: มทวณ
- (14) Delete (button)
- (15) Edit (button)
- (16) OK (button)

(8) Planning - Start time

This is used to set the start date and time using a calendar.

(9) Planning - End time

This is used to set the end date and time using a calendar.

(10) Select Vehicle

This is used to select a vehicle in the pull-down menu.

(11) Select Driver

This is used to select a driver in the pull-down menu.

(12) Delivery Point Setting

This is used to set an arrival point either in the pull-down menu, or on the map.

(13) Registration Button

This is used to register the plan.

(14) Delete Plan Button

This is used to delete the delivery plan.

(15) Modify (Edit) Button

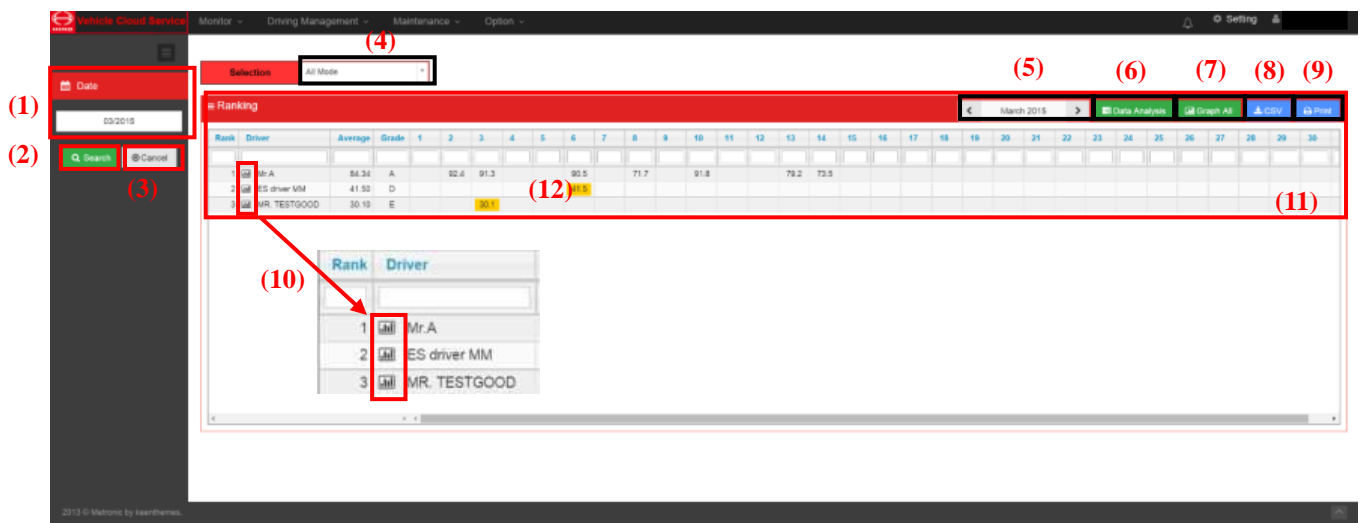
This is used to modify the delivery plan.

(16) Confirm Modify Button

This button is used to confirm the modification of the delivery plan.

2.5 Ranking

You can find out the driving eval by driver by month.



(1) Date Search

This is used to select the period (year and month) to search.

(2) Search Button

This is used to start a search.

(3) Cancel Button

This is used to abort the search.

(4) Evaluation Item Selection

You can select from any of the following options: Comprehensive Evaluation, Safe Driving Eval, or ECO Driving Eval.

(5) Search Month Change

You can search either the previous month or the next month in monthly increments.

(6) Data Analysis Button

After selecting the driver that you want to analyze, pressing this button will shift to the Detail Analysis.

(7) Graph All Button

The percentage of rank is displayed in the stacked vertical bar graph for the 6 months period.

* The graph for the 6 months period prior to the search month is displayed.

(The period includes the search month.)

(8) CSV Button

This button is used to download the table displayed on the screen in a CSV format.

(9) Print Button

This is used to print the table displayed on the screen.

(10) Graph Button

This is used to shift to the selected Monthly Ranking Progress Graph of the individual.

Instead of pressing the Graph button, clicking the selected driver in the selected table will also shift to the said graph of the driver.

(11) Drivers' Monthly Ranking Table

The evaluation score of the specified month is displayed for each driver.

The evaluation scores can be displayed in 2 different colors according to the evaluation stage.

* The background color will change according to the evaluation score.

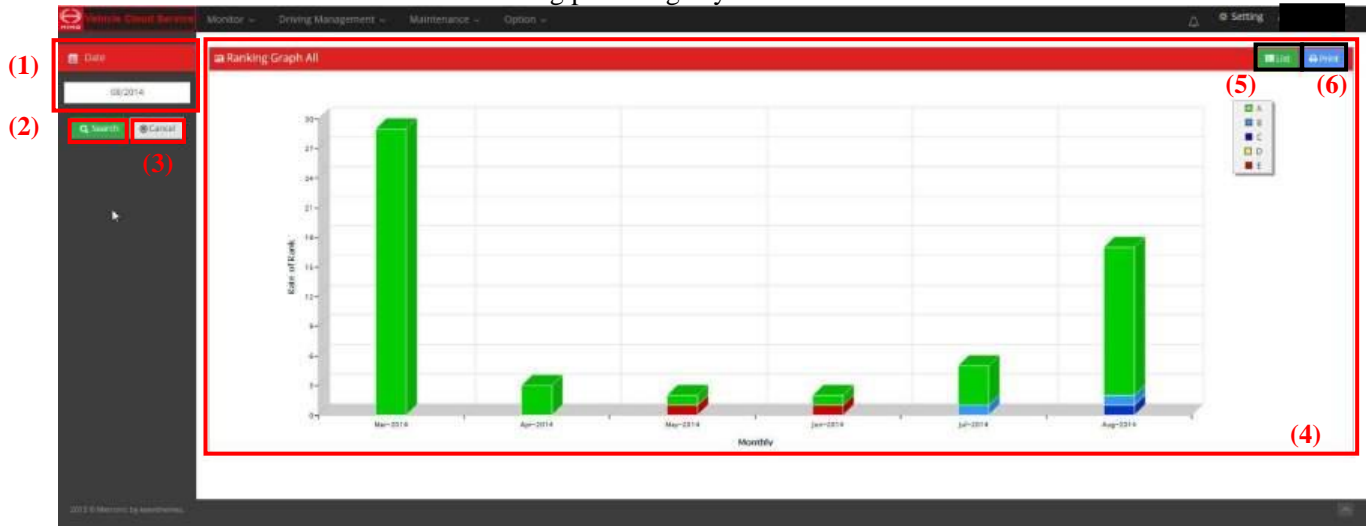
30 - 60 points or less: Yellow/ Less than 30 points: Red

(12) Each Ranking Score

Clicking each of the Ranking Scores will shift to the Detailed Analysis screen at the time.

2.5.1 Ranking (Monthly Progress)

You can check the evaluation ranking percentage by office.



(1) Date Search

This is used to select the period (year and month) to search.

(2) Search Button

This is used to start a search.

(3) Cancel Button

This is used to abort the search.

(4) Graph Area

The percentage of rank is displayed in the stacked vertical bar graph for the 6 months period.
* The graph for the 6 months period prior to and including the search month is displayed.

(5) List Button

This is used to shift the to the List screen.

(6) Print

This is used to print the graph displayed on the screen.

2.5.2 Ranking (Individual Progress)

You can check the individual's ranking progress.



(1) Date Search

This is used to select the period (year and month) to search.

(2) Search Button

This is used to start a search.

(3) Cancel Button

This is used to abort the search.

(4) Graph Area

The progress of the scores for a month is shown in the Line graph.

The score progress of the Evaluation Items (Comprehensive Evaluation, Safe Driving Eval, and ECO Driving Eval) selected in the List is represented.

(5) List Button

This is used to shift the to the List screen.

(6) Print Button

This is used to print the graph displayed on the screen.

2.6 Daily Report /Guidance

2.6.1 Daily Report(Vehicle)

This function is used to display Daily Report for each vehicle.

The screenshot shows the 'Vehicle Cloud Service' interface. On the left, a sidebar contains search filters: (1) Date From (2017-07-27 00:00), (2) Date To (2017-08-02 23:59), (3) Driver (Select Driver), and (4) Vehicle (x All). Below these are (5) Search and Cancel buttons. The main area displays the 'Daily Report (Vehicle)' for the date 2017-07-27. The table has columns: Vehicle Name, Driver Name, (6) Report, Service Start Time, Service End Time, Transit Time, Fuel Graph, Refuel Amounts, and Fuel Consump (km/l). The Report column contains a grid of icons (D, A, P, F, T) representing different report types. A red box (7) highlights the Report column for the first few rows. Other red boxes (8, 9, 10) highlight the 'Daily Report' button, the date selector, and the date input field respectively.

Vehicle Name	Driver Name	(6) Report	Service Start Time	Service End Time	Transit Time	Fuel Graph	Refuel Amounts	Fuel Consump (km/l)
otuki2	MR.DRIVER1	(7)	27-07-2017 08:18:00	27-07-2017 10:39:03	00:07:06		0.7	
otuki2	ES Driver 2	(7)	27-07-2017 11:21:34	27-07-2017 12:51:20	01:21:06		17.5	
otuki2	ES Driver 3	(7)	27-07-2017 13:15:17	27-07-2017 17:10:00	03:37:53		50.0	
otuki2	MR A	(7)	27-07-2017 17:13:49	28-07-2017 00:39:38	04:59:30		58.6	
toon-san ver4	MR HONG ...	(7)	27-07-2017 21:03:08	28-07-2017 06:19:16	01:16:24		225.0	
ES-922-003	MR.DriverA	(7)	27-07-2017 16:36:31	27-07-2017 17:33:32	00:39:30		0	
YZK991000...	MR. TOIUU	(7)	27-07-2017 14:16:01	28-07-2017 10:52:58	05:07:58		0	
ES-922-006	MR.TTTTG...	(7)	27-07-2017 17:13:27	28-07-2017 05:35:50	00:54:08		0	
ES-922-003	MR HONG ...	(7)	27-07-2017 06:00:18	27-07-2017 14:50:14	03:14:11		0	
ES-922-003	MR HONG ...	(7)	27-07-2017 15:00:29	27-07-2017 16:20:18	01:09:03		0	
ES-922-006	MR HONG ...	(7)	27-07-2017 16:21:31	27-07-2017 16:54:06	00:01:38		0	
09091212	MR HONG ...	(7)	27-07-2017 19:02:15	28-07-2017 11:30:48	04:12:02		0	
ES-910-0002	Mr.Test	(7)	27-07-2017 08:05:56	28-07-2017 06:07:12	03:42:53		0	

(1) Time Search(From/To)

This is used to select the search criteria for Daily Reports which are created between "Date From" and "Date To".

(2) Driver Name Search

This is used to select the search criteria by driver name.

(3) Vehicle Name Search

This is used to select the search criteria for vehicles.

At first, it displays Daily Report for all vehicle.

Enter a vehicle name and search if you wish to view the Daily Report of the particular vehicle.

(4) Search Button

This is used to start a search.

(5) Cancel Button

This is used to abort the search.

(6) Display search results

Displays search results.

The following items will be displayed.

- Vehicle Name
- Driver Name
- Report
- Service Start Time
- Service End Time
- Transit Time
- Mileage
- Stop Time (Over 30min)
- Over Speed Count
- Over Speed Time

- Average Speed
- Max Speed
- Over RPM Count
- Over RPM Time
- Max RPM
- Abrupt Start Count
- Sudden Acceleration Count
- Abrupt Deceleration Count
- Idling Time
- Max Hours Exceeded
- Total Eval Score
- Total Eval Rank
- Safe Driving Eval Rank
- ECO Driving Eval Rank
- Safe Driving Eval Score
- ECO Driving Eval Score
- EXT Ch1-9 ON Count

(7) Report

Clicking on to this button displays each travel result.

- D** -This button is used to open the Daily Report screen.
(Refer "2.6.3 Daily Report <Scatter Graph>" and
"2.6.4 Daily Report <Speed Chart>" for further details)
- A** -This button is used to open the Data Analysis screen.
- P** -This button is used to open the Vehicle Path screen.
- T** -This button is used to open the Temperature Graph screen.
- F** -This button is used to open the Fuel Graph screen.

(8) Report Button

The corresponding screen opens when the button is clicked after applying checks on to the check box, which is at the left side of the Daily Report list.

In order to view multiple travels at once, click the button after applying a check on to the check box for travels which you wish to view.

(9) CSV Button

This is used to output the service performance table values in a CSV file.

(10) Change date button

This button can change date that shown in the graph.

2.6.2 Daily Report(Driver)

This function is used to display Daily Report for each driver.

The screenshot shows the 'Vehicle Cloud Service' interface. The top navigation bar includes 'Monitor', 'Driving Management', 'Maintenance', and 'Option'. The main header has tabs for 'Daily Report (Driver)', 'Data Analysis', 'Vehicle Path', 'Fuel Graph', 'Temperature', and 'CSV'. The date '27-07-2017' is selected. The sidebar on the left contains filters: (1) Date From (27-07-2017 00:00), (2) Date To (02-08-2017 23:59), (3) Driver (All), and (4) Vehicle (Select Vehicle). The main table displays search results with columns: Vehicle Name, Driver Name, Report, Service Start Time, Service End Time, Transit Time, and Mileage(km). The table is filtered by the selected criteria. Red boxes and numbers (1-10) highlight specific UI elements: (1) Date From, (2) Date To, (3) Driver, (4) Vehicle, (5) Search Button, (6) Cancel Button, (7) Search results table, (8) Daily Report (Driver) tab, (9) Data Analysis tab, and (10) CSV tab.

Vehicle Name	Driver Name	Report	Service Start Time	Service End Time	Transit Time	Mileage(km)
ES-922-003	MR HONG ...	D A P F T	27-07-2017 06:00:18	27-07-2017 14:50:14	03:14:11	138.8
ES-922-003	MR HONG ...	D A P F T	27-07-2017 15:00:29	27-07-2017 16:20:18	01:09:03	54.2
ES-922-006	MR HONG ...	D A P F T	27-07-2017 16:21:31	27-07-2017 16:54:06	00:01:38	0.3
09091212	MR HONG ...	D A P F T	27-07-2017 19:02:15	28-07-2017 11:30:48	04:12:02	185.1
YZK991000...	MR. TOIUU	D A P F T	27-07-2017 14:16:01	28-07-2017 10:52:58	05:07:58	172.0
ES-922-003	MR. DriverA	D A P F T	27-07-2017 16:36:31	27-07-2017 17:33:32	00:39:30	28.9
ES-922-0002	MR. TEERA...	D A P F T	27-07-2017 16:02:22	28-07-2017 12:43:40	00:04:54	0.5
ES-922-006	MR. TTTTG...	D A P F T	27-07-2017 17:13:27	28-07-2017 05:35:50	00:54:08	34.2
ES-922-006	MR. lok	D A P F T	27-07-2017 17:00:31	27-07-2017 17:00:51	00:00:17	0.1
ES-910-0002	Mr. Test	D A P F T	27-07-2017 08:05:56	28-07-2017 06:07:12	03:42:53	151.3
toon-san ver4	tsukamoto	D A P F T	27-07-2017 21:03:08	28-07-2017 06:19:16	01:16:24	57.9

(1) Time Search(From/To)

This is used to select the search criteria for Daily Reports which are created between "Date From" and "Date To".

(2) Driver Name Search

This is used to select the search criteria by driver name.

At first, it display Daily Report for all drivers.

Enter a driver name and search if you wish to view the Daily Report of the particular driver.

(3) Vehicle Name Search

This is used to select the search criteria for vehicles.

(4) Search Button

This is used to start a search.

(5) Cancel Button

This is used to abort the search.

(6) Display search results

Displays search results.

The following items will be displayed.

- Driver Name
- Vehicle Name
- Report
- Service Start Time
- Service End Time
- Transit Time
- Mileage
- Stop Time (Over 30min)
- Over Speed Count
- Over Speed Time
- Average Speed
- Max Speed
- Over RPM Count
- Over RPM Time

- Max RPM
- Abrupt Start Count
- Sudden Acceleration Count
- Abrupt Deceleration Count
- Idling Time
- Max Hours Exceeded
- Total Eval Score
- Total Eval Rank
- Safe Driving Eval Rank
- ECO Driving Eval Rank
- Safe Driving Eval Score
- ECO Driving Eval Score
- EXT Ch1-9 ON Count

(7) Report

Clicking on to this button displays each travel result.

- D** -This button is used to open the Daily Report screen.
(Refer "2.6.3 Daily Report <Scatter Graph>" and "2.6.4 Daily Report <Speed Chart>" for further details)
- A** -This button is used to open the Data Analysis screen.
- P** -This button is used to open the Vehicle Path screen.
- T** -This button is used to open the Temperature Graph screen.
- F** -This button is used to open the Fuel Graph screen.

(8) Report Button

The corresponding screen opens when the button is clicked after applying checks on to the check box, which is at the left side of the Daily Report list.

In order to view multiple travels at once, click the button after applying a check on to the check box for travels which you wish to view.

(9) CSV Button

This is used to output the service performance table values in a CSV file.

(10) Change date button

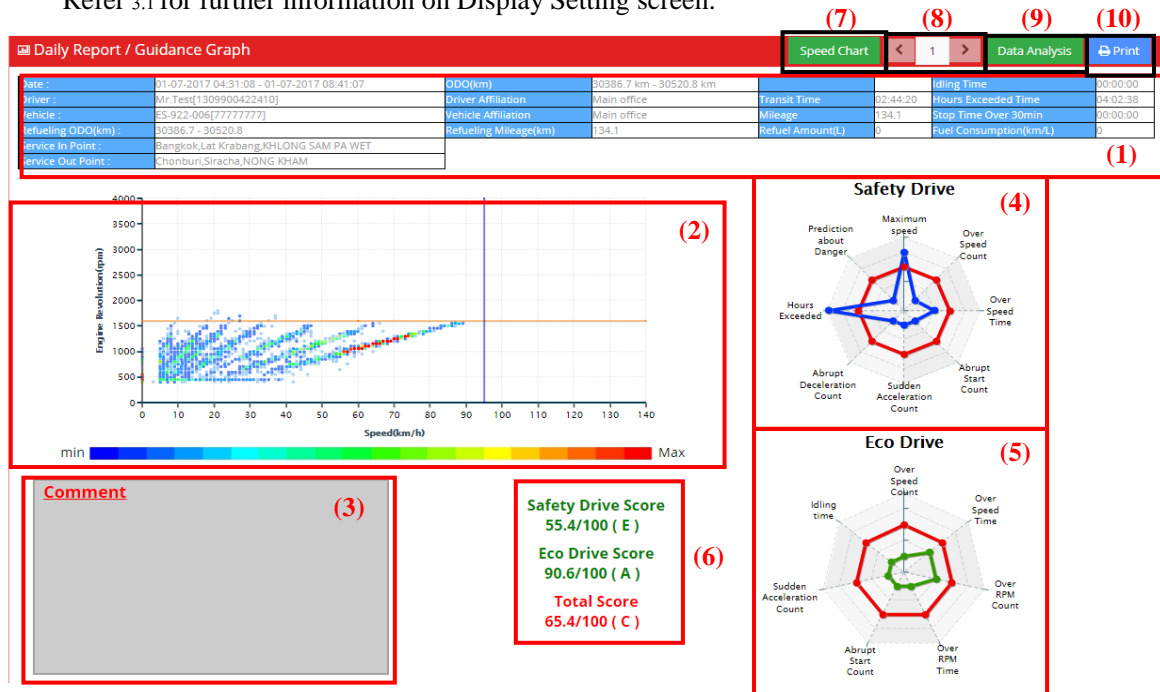
This button can change date that shown in the graph.

2.6.3 Daily Report<Scatter Graph>

You can check the daily report by push Daily Report button.

<Refer "2.6.1 Daily Report (Vehicle)", or "(7) Report" and "(8) Report Button" section in "2.6.2 Daily Report (Driver)".>

Selecting the Scatter Graph under Daily Report Type in the Display Setting screen displays the screen below.
Refer 3.1 for further information on Display Setting screen.



(1) Service Information Display

The service information is displayed.

The display content includes the following items.

- Service Date and Time
- Vehicle Name
- Driver Name
- Drivers' Affiliation
- Vehicle Affiliation
- Transit Time
- Mileage,
- Hours Exceeded
- Stop Time Over 30min
- ODO(km)
- Refueling ODO(km)
- Refueling Mileage(km)
- Refuel Amounts
- Idling Time
- Fuel Consumption
- Service IN Point
- Service OUT Point

(2) Scatter Diagram

The scatter diagram of the service is displayed

The horizontal axis represents the speed, and the longitudinal axis represents the Engine Speed (RPM).



(3) Comment Display

The comments on the guidance for improvement are displayed.

(4) Radar Chart for Safe Driving Evaluation

The radar chart for safe driving is displayed.

The red line refers to the company target value and the blue line refers to the actual travel evaluation score. (Refer "3.3.5 Evaluation Setting" for further information on company target value setting.)

Evaluation items are as listed below.

- Max Speed
- Over Speed Count
- Over Speed Time
- Abrupt Start Count
- Sudden Acceleration Count
- Abrupt Deceleration Count
- Hours Exceeded,
- Selection 1 / Selection 2 / Selection 3

(5) Radar Chart for ECO Driving Evaluation

The radar chart for ECO driving is displayed.

The red line refers to the company target value and the green line refers to the actual travel evaluation score. (Refer "3.3.5 Evaluation Setting" for further information on company target value setting.)

Evaluation items are as listed below.

- Over Speed Count
- Over Speed Time
- Over RPM Count
- Over RPM Time
- Abrupt Start Count
- Sudden Acceleration Count
- Idling Time
- Selection 1 / Selection 2 / Selection 3

(6) Evaluation Score Display

The following items are displayed.

- Safe Driving Eval Rank and the Evaluation Score
- ECO Driving Eval Rank and the Evaluation Score
- Comprehensive Evaluation Rank and the Evaluation Score

(7) Speed Chart Button

This is used to transit to Speed Chart screen.

(8) Change service index button

This is used to switch the displayed travel whenever there are multiple travels held on the displayed date.

(9) Detail Analysis Button

This is used to open a Detail Analysis.

(10) Print Button

This is used to print the daily report displayed on the screen.

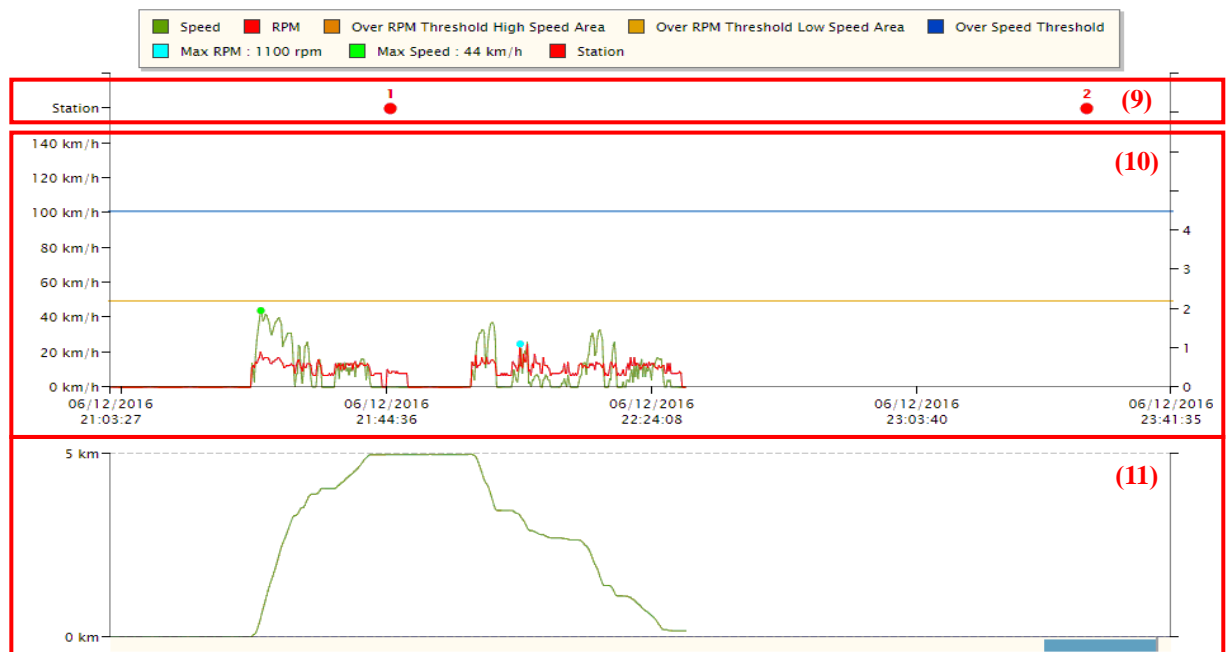
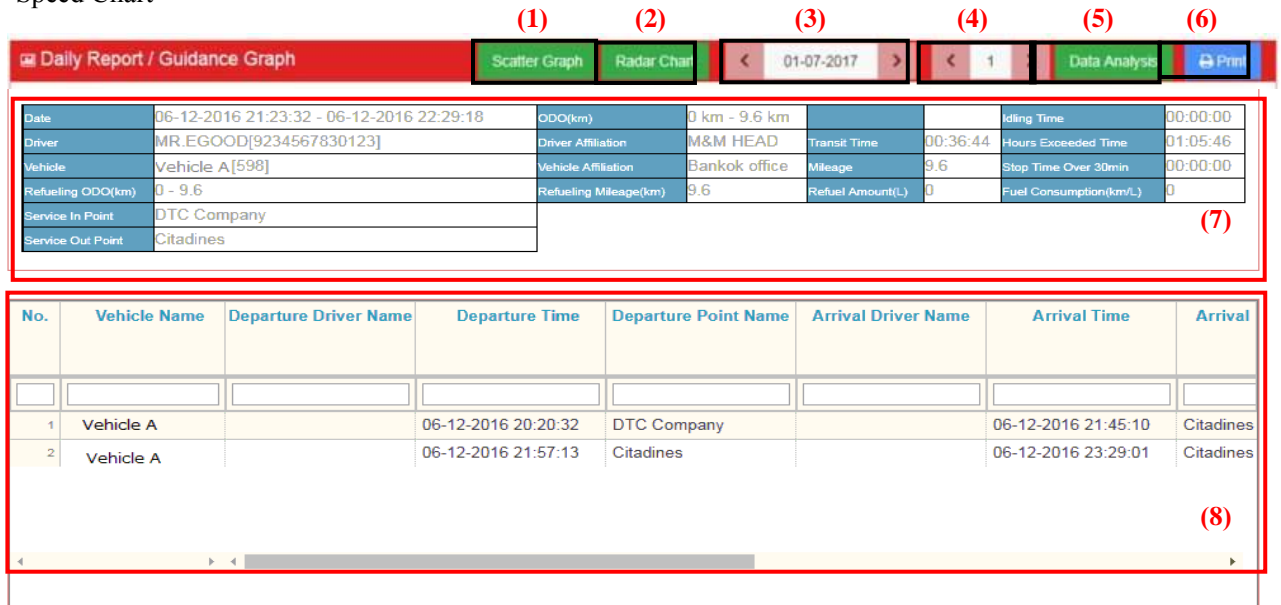
2.6.4 Daily Report<Speed Chart>

You can check the daily report by push Daily Report button.

<Refer "2.6.1 Daily Report (Vehicle)", or "(7) Report" and "(8) Report Button" section in "2.6.2 Daily Report (Driver)".>

Selecting the Speed Chart under Daily Report Type in the Display Setting screen displays the screen below.
Refer 3.1 for further information on Display Setting screen.

<Speed Chart>



(1) Scatter Graph Button

This is used to transit to Scatter Graph screen.

(2) Rader Chart Button

This is used to transit to Rader Chart screen.

(3) Change date button

This button can change date that shown in the graph.

(4) Change service index button

This is used to switch the displayed travel whenever there are multiple travels held on the displayed date.

(5) Detail Analysis Button

This is used to open a Detail Analysis.

(6) Print Button

This is used to print the daily report displayed on the screen.

(7) Service Information Display

The service information is displayed.

The display content includes the following items.

- Service Date and Time
- Vehicle Name
- Driver Name
- Drivers' Affiliation
- Vehicle Affiliation
- Transit Time
- Mileage,
- Hours Exceeded
- Stop Time Over 30min
- ODO(km)
- Refueling ODO(km)
- Refueling Mileage(km)
- Refuel Amounts
- Idling Time
- Fuel Consumption
- Service IN Point
- Service OUT Point

(8) Station Report

It displays the station report within the travel.

(9) Station Bar

The station arrival time will be plotted on to the station bar.

The station report number will be shown above the dot.

(10) Speed Chart, RPM Chart

Display the speed chart and the RPM chart.

(11) Sub Graph

Displays the sub-graph.

Setting for the displayed sub-graph can be done from Display Setting screen. Refer 3.1.

- Stop Time Over 30min
- ODO(km)
- RefuelingODO(km)
- Refueling Mileage(km)
- Refuel Amounts
- Idling Time
- Fuel Consumption
- Service IN Point
- Service OUT Point

(7) Radar Chart

Services evaluated by vehicle type in accordance with the setting of the evaluation standard value are displayed in a radar chart.

*For the calculation of each evaluation, refer to “3.3.5 Evaluation Setting.”

Concerning the Radar Chart for Safe Driving Evaluation

The red line refers to the company target value, and the blue line refers to the actual travel evaluation score.

Concerning the Radar Chart for ECO Driving Evaluation

The red line refers to the company target value, and the blue line refers to the actual travel evaluation score.

※Refer "3.3.5 Evaluation Setting" for further information of company target value.

Displays a comment automatically for each score.

(Refer "3.3.5 Evaluation Setting" for further information on detailed setting for comments)

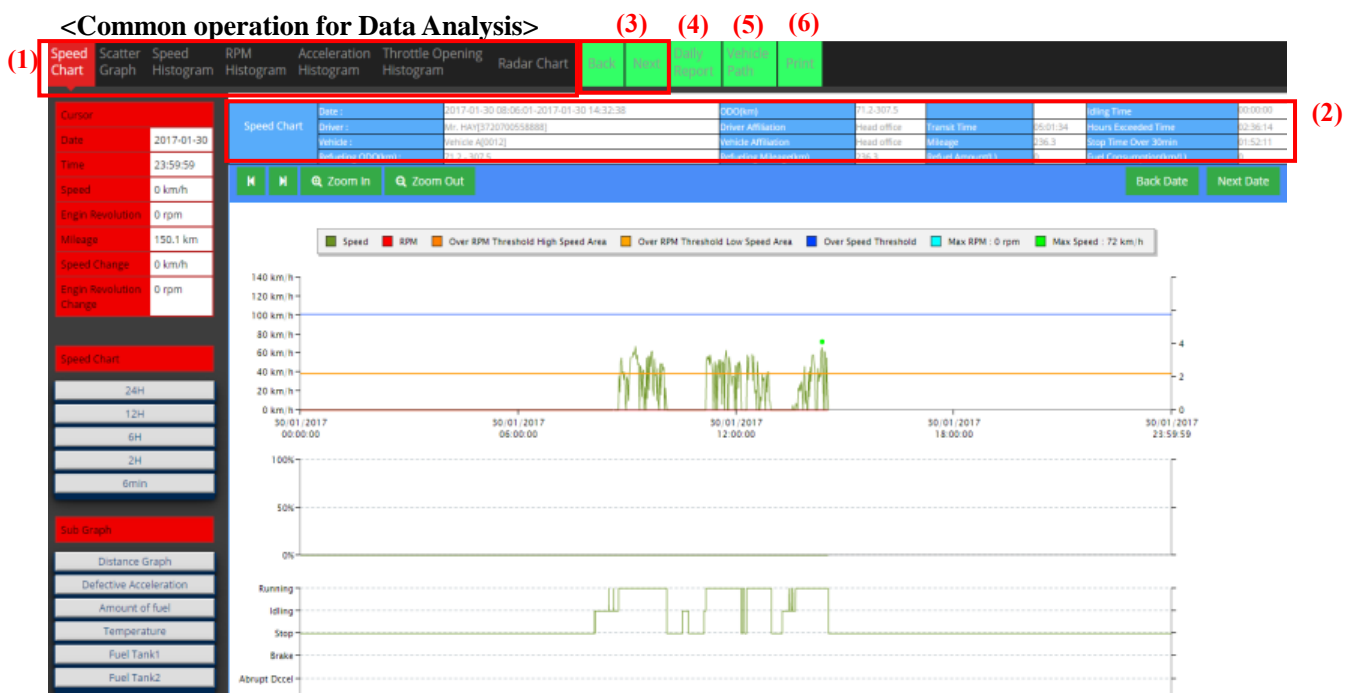
2.6.5 Data Analysis

The following analysis screens are prepared for Data Analysis.

- Speed Chart
- Scatter Graph
- Speed Histogram
- RPM Histogram
- Acceleration Histogram
- Throttle Opening Histogram
- Radar Chart

*The display screen can be set to default using the “Display setting.” (The default screen is a Speed Chart screen.)

<Common operation for Data Analysis>



(1) Data Analysis Display

This button is used to switch the display to each analysis screen.

- Speed Chart
- Scatter Graph
- Speed Histogram
- RPM Histogram
- Acceleration Histogram
- Throttle Opening Histogram
- Radar Chart

(2) Service Information Display

The service information is displayed.

The display content includes the following items.

- Service Date and Time
- Vehicle Name
- Driver Name
- Drivers' Affiliation
- Vehicle Affiliation
- Mileage, Transit Time
- Hours Exceeded
- Stop Time Over 30min
- ODO(km)
- Refueling ODO(km)
- Refueling Mileage(km)
- Refuel Amounts
- Idling Time
- Fuel Consumption

(3) Back ▪ Next Button

This is used to move to the previous service or the next service when multiple services are selected.

(4) Daily Report Button

This is used to open the Daily Report screen.

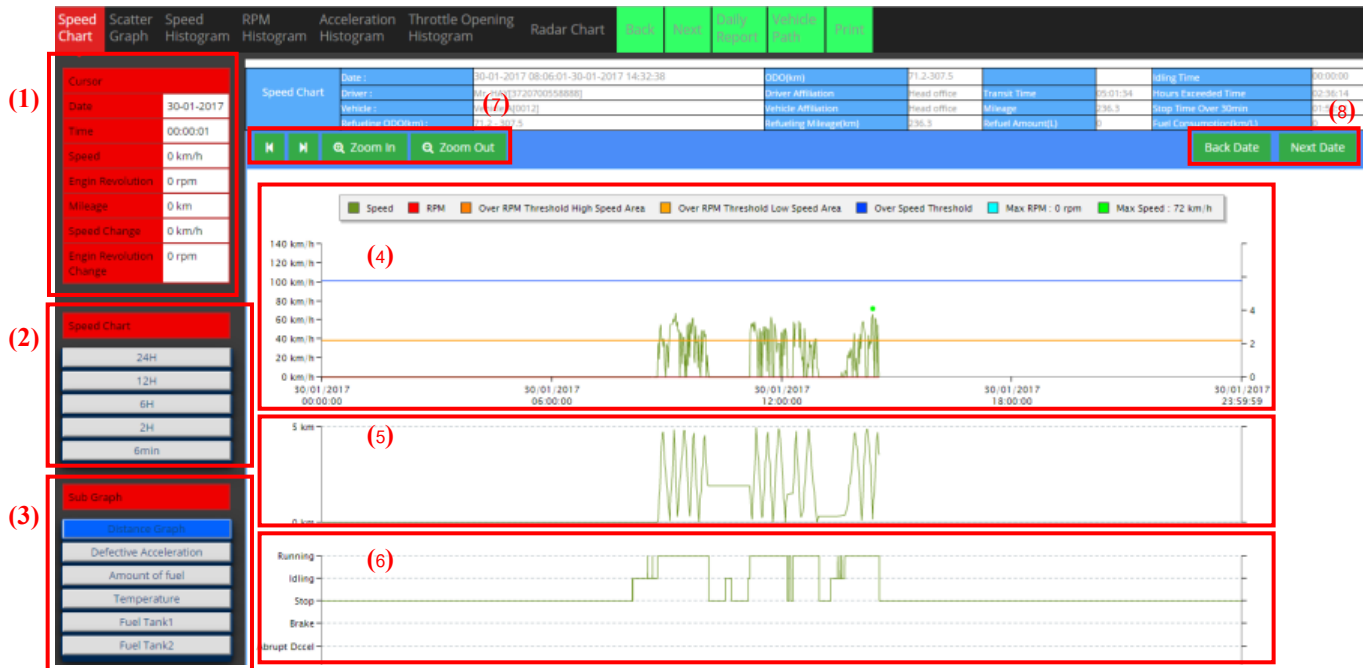
(5) Vehicle Path Button

This is used to open the Vehicle Path screen.

(6) Print Button

This is used to print the search results.

2.6.5.1 Speed Chart



(1) Cursor Information Display

When the cursor is pointed over “Date, Time, Speed, Engine Revolution, Mileage, Speed Change, and Engine Revolution Change”, the Speed Chart will be displayed.

(2) Time Scale Switch

Time scale of the Speed Chart can be changed.

(3) Sub Graph Switch

Graphs displayed in the Sub Graph can be switched. The following graphs can be displayed.

- Distance Graph
- Defective Acceleration
- Amount of fuel
- Temperature
- Fuel Tank1
- Fuel Tank2

The default display is set to “Distance Graph.”

*The default display can be changed in the Display Setting screen. Refer to “3.1 Display Setting.”

(4) Speed Chart Graph

The graph shows the Speed and the Engine Revolution for one service.

(5) Sub Graph

The Sub Graph is displayed.

(6) Bar Chart

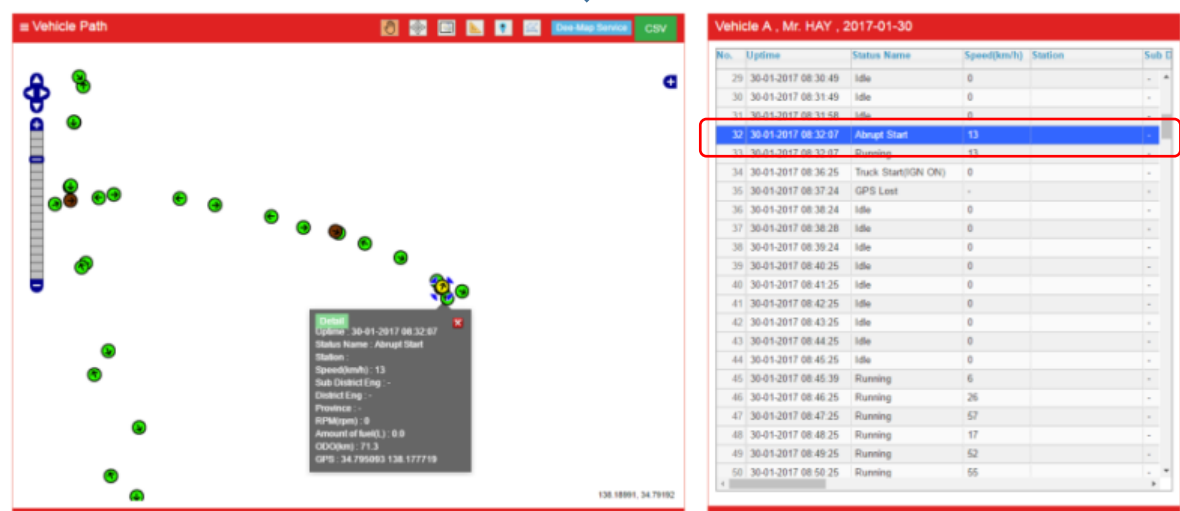
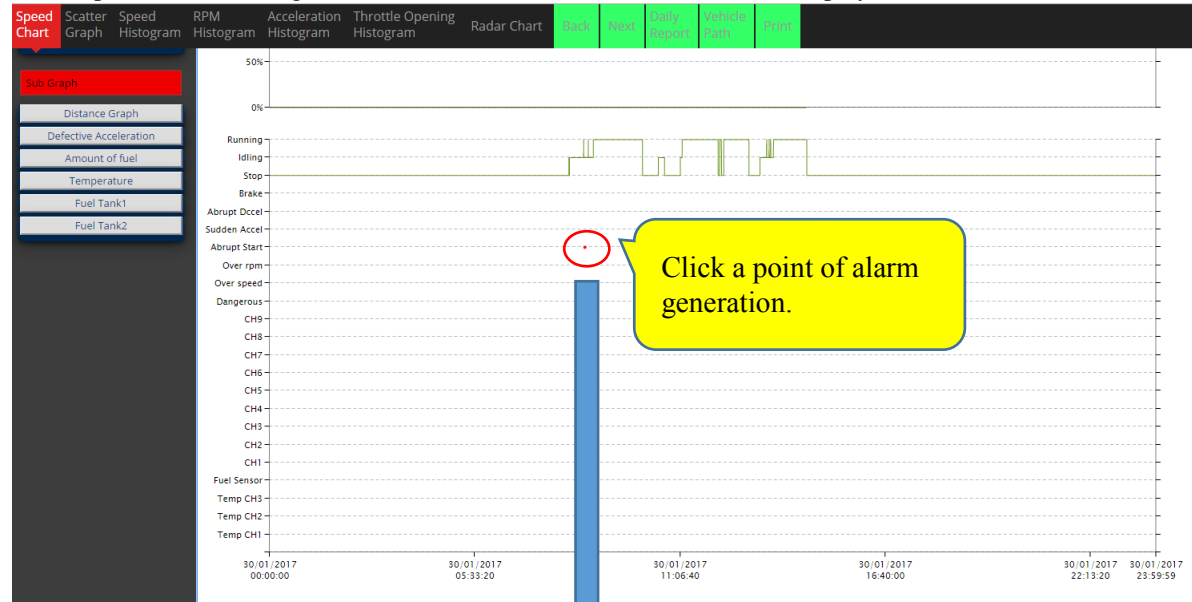
The vehicle status and the alarm generation timing can be checked from the service data.

The following items can be checked.

- Vehicle Status (Running, Idling, Stop)
- Brake
- Abrupt Dccel
- Sudden Accel
- Arupt Start
- Over rpm

- Over speed
- Dangerous
- CH1-9
- Fuel Tank Alarm
- Temp CH1,2,3

Click a point of the alarm generation and the Vehicle Path screen will be displayed.



(7) Operation of Speed Chart Graph

The Speed Chart Graph can be scrolled and zoomed in or out.

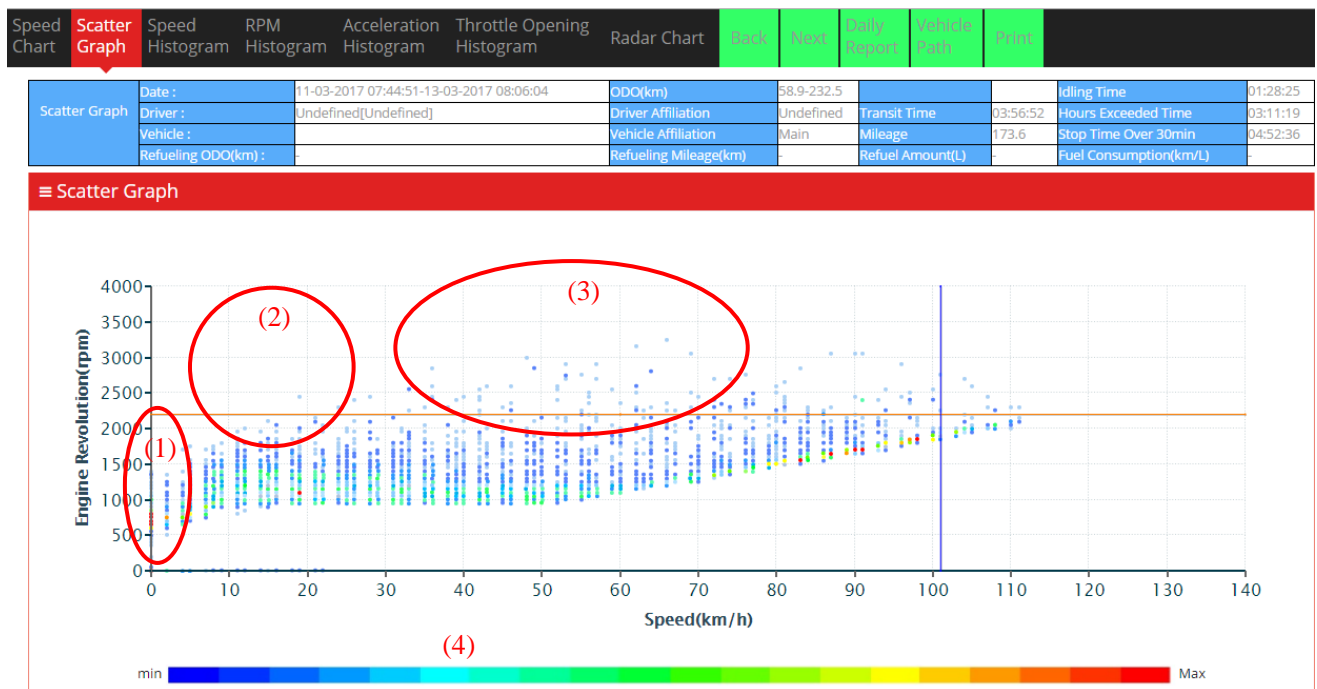
(8) Date Switch Button

If one service is conducted in multiple days, date of a graph to be displayed can be changed to the previous date or the next date.

2.6.5.2 Scatter Graph

The scatter diagram of the service is displayed

The horizontal axis represents the speed, and the longitudinal axis represents the Engine Speed (RPM).



(1)It can be said that overspeed at 0km/h zone is “racing.”

(2)It can be said that overspeed at the low speed zone is “overpulling in a low gear.”

(3)In the middle speed zone, “whether shift operation is appropriate” can be checked.

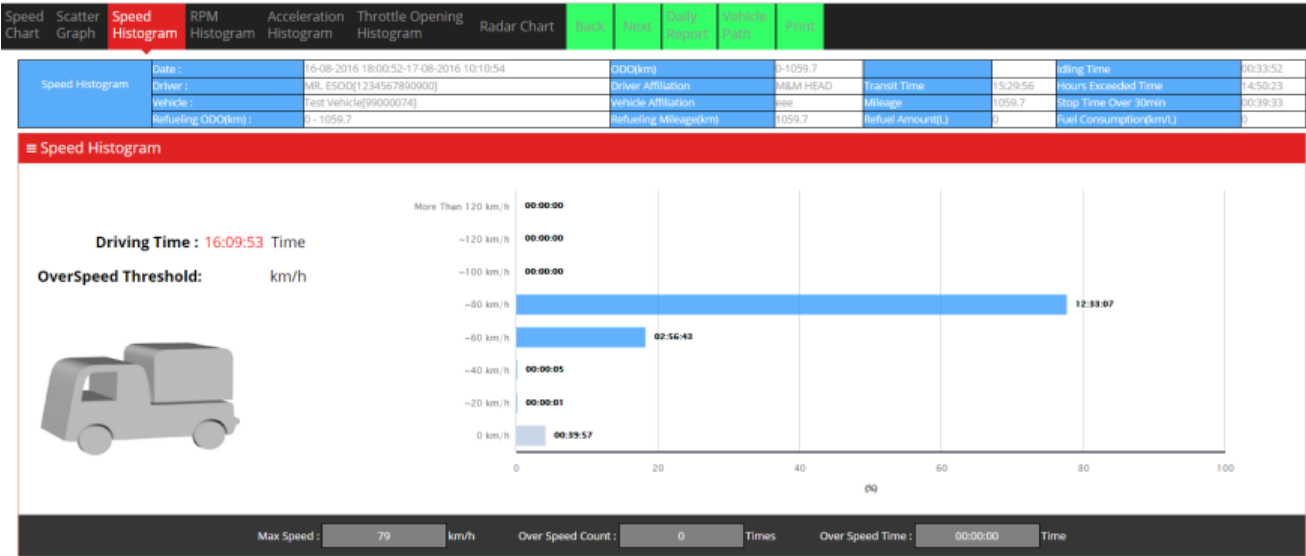
(4) the default color of the graph can be set from blue (low) to red (high), however, the color of the graph can be changed.

When the same Speed and the same Engine Revolution are detected, points will be added and the color will be shifted toward red (high).



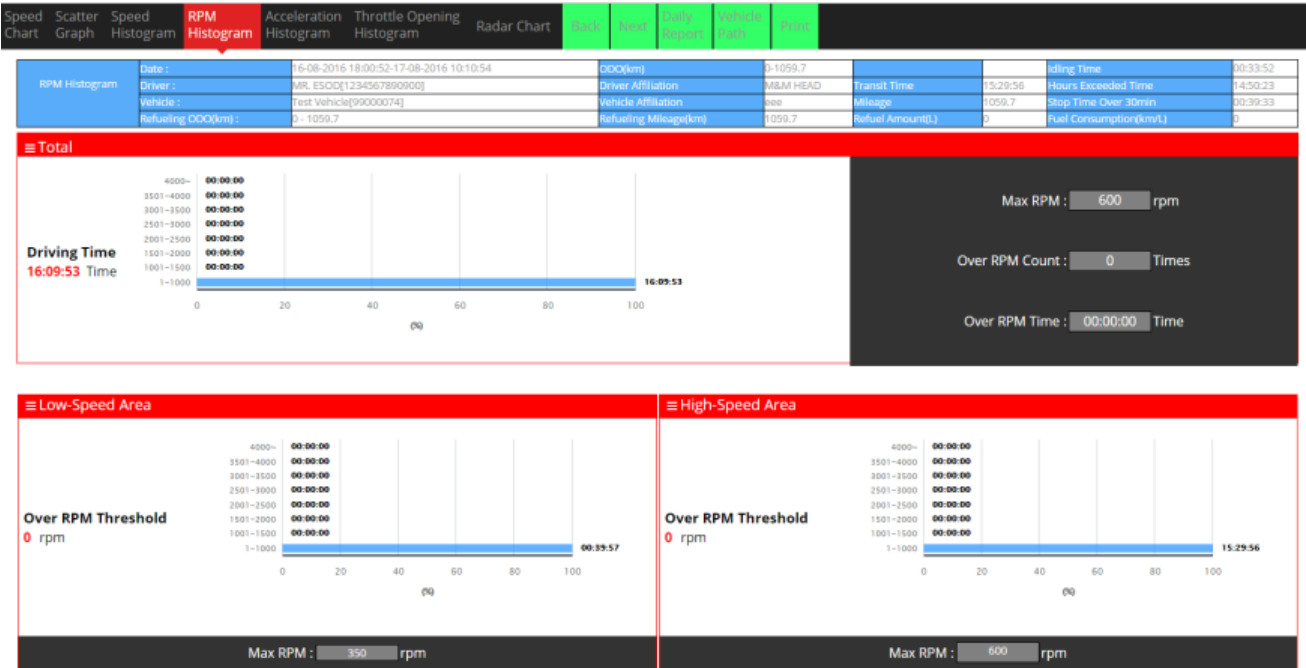
2.6.5.3 Speed Histogram

The ratio of the driving time by the speed zone is displayed with a bar graph.



2.6.5.4 RPM Histogram

The ratio of the driving time by the engine revolution is displayed with a bar graph.



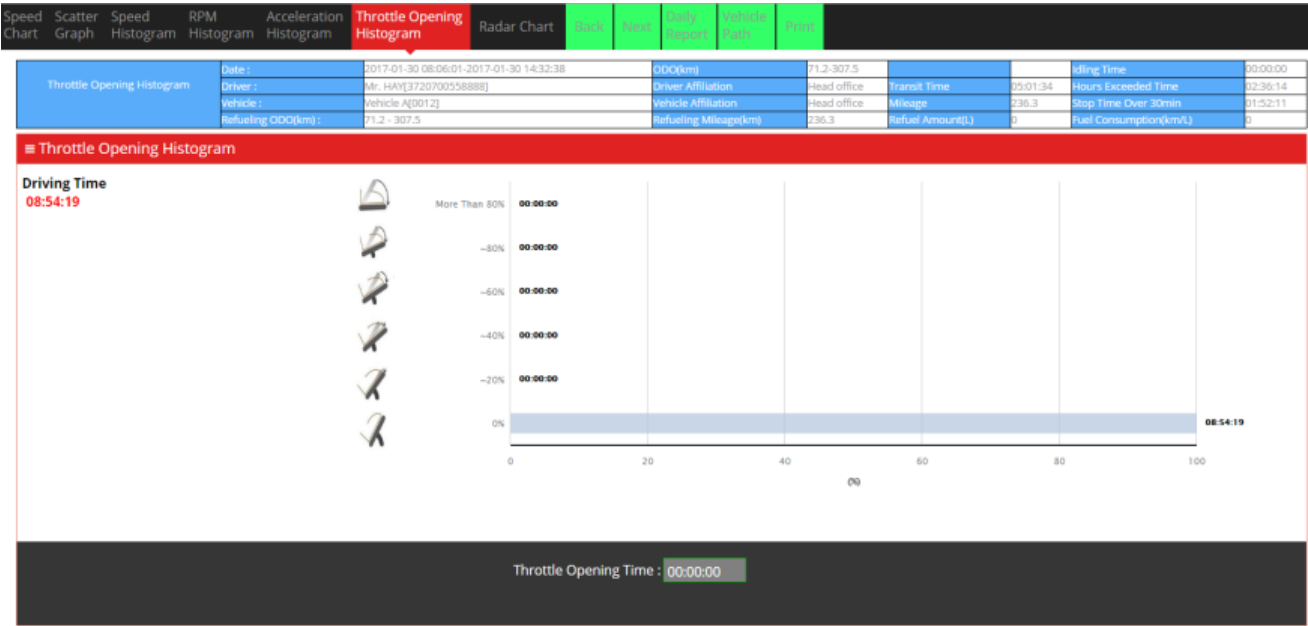
2.6.5.5 Acceleration Histogram

The frequency ratio of the rapid acceleration and deceleration by rankings is displayed with a bar graph.



2.6.5.6 Throttle Opening Histogram

The ratio of the driving time by throttle opening is displayed with a bar graph.



2.6.5.7 Radar Chart

Services evaluated by vehicle type in accordance with the setting of the evaluation standard value are displayed in a radar chart.

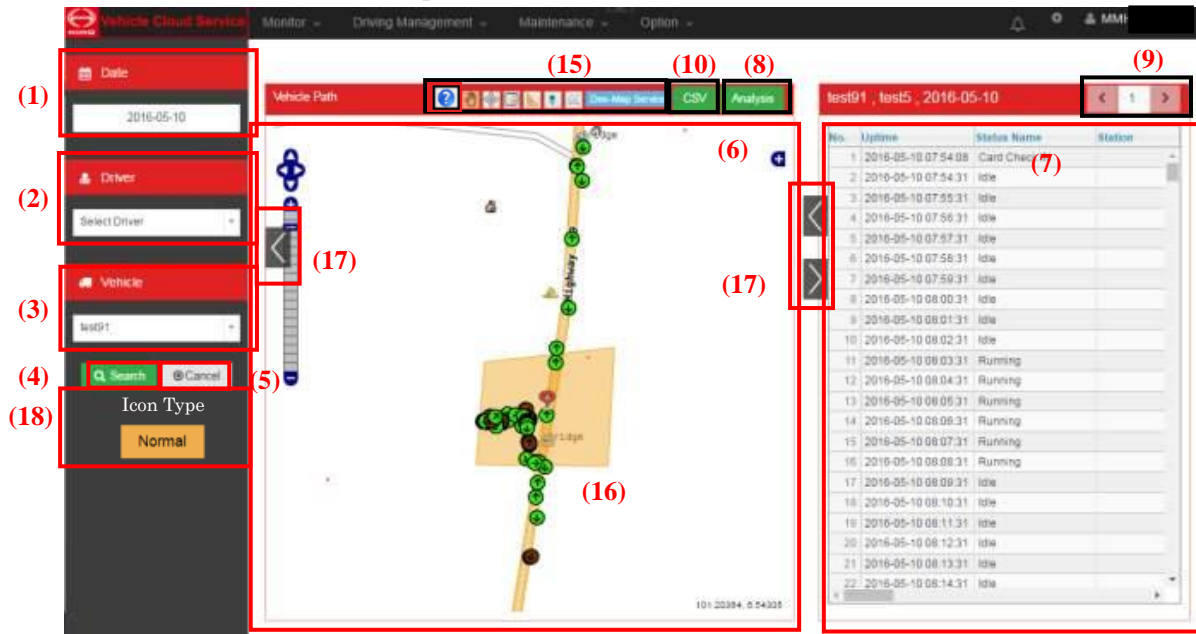
The radar chart to be printed in “2.6.3 Daily Report” is the same as this screen.

*For the calculation of each evaluation, refer to “3.3.5 Evaluation Setting.”



2.7 Vehicle Path

You can check a vehicle path.



(1) Date Search

This is used to select the search period (year, month and date).

(2) Vehicle Name Search

This is used to select the search criteria for vehicles.

(3) Driver Name Search

This is used to select the search criteria by driver name.

(4) Search Button

This is used to start a search.

(5) Cancel Button

This is used to abort the search.

(6) Map Area

The searched service path is shown on the map. On the map, the color indicates the vehicle status, and the arrows indicate the moving direction. When you select a vehicle on the map, the detailed information will be displayed.

Furthermore, pressing the detail button in the detailed information will shift to the vehicle detail screen.

* The icons for the departure and arrival points will be displayed.

* It allows to display the path in a 1 minute time series as well as displaying the following event items in color: Run, Stop, Abrupt Start, Sudden Acceleration, Abrupt Deceleration, Over speed, Idling, and Hours Exceeded/running. For the color display, please refer to the attachment.

* The Station icon and the area will be displayed on the map.

(7) List Area

The list of the services searched is displayed

<Data output items> ★: Data for the items with this mark is a variation from data of the Service Start Time.

- Time
- Event Name
- Station Name
- Speed(km/h)
- Sub District
- District
- Province
- ODO(km)
- Distance(km) (★)
- Amount of fuel(L) (★)
- RPM(rpm)
- Driver Name
- Driver Type
- Driver No.
- Temperature ch1,ch2,ch3
- GPS(Latitude, longitude)
- Fuel Tank1
- Fuel Tank2
- Law Over Speed

(8) Detail Analysis Button

This is used to shift to the Detail Analysis.

(9) Switch Service Button

Where the search result returns 2 or more services, this button is used to shift to the next service or to go back to the original service (Switch Service Button).

(10) CSV button

This is used to display a screen to specify a data input period.
Event data of the specified period can be output to a CSV file.

<Screen to specify CSV data output period>

(11) Service Start Time

Specify data output start time.

(12) Service End Time

Specify data output end time.

This can be specified to the date up to 1 month after the Service Start Time.

(13) Data output button

This is used to output data of the specified period.

<Data output items> ★: Data for the items with this mark is a variation from data of the Service Start Time.

- Time
- Event Name
- Station Name
- Speed(km/h)
- Sub District
- District
- Province
- ODO(km)
- Distance(km) (★)
- Amount of fuel(L) (★)
- RPM(rpm)
- Latitude, longitude
- Driver Name
- Driver Type
- Driver No.
- Temperature ch1,ch2,ch3
- Fuel Tank1
- Fuel Tank2
- Law Over Speed

(14) Cancel button

This is used to cancel data output.

(15) Map Option Button

The following functions can be used on the map.

- Map Move Button: Moves the display position of the map by dragging.



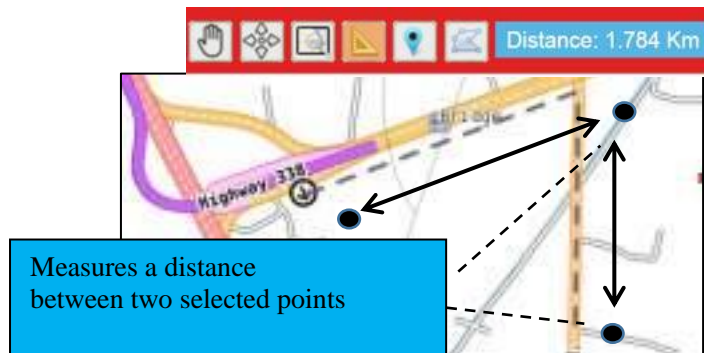
- Cancel Button: Cancels an optional function currently in use.



- Area Zoom Button: Zooms in a selected area on the map.



- Distance Measuring Button: Measures a distance between two selected points on the map.



- Add Station Button: Adds a Station on the map by clicking its position.
The Add Station screen will be displayed.



- Add Station Polygon Button: Adds a Station Polygon on the map by clicking its position.
The Add Station screen will be displayed.



- Icon Example Button: Display description of the vehicle icon of each color on the map.



<Add Station Screen>

Station

Station Name:

Station Type Name:

Format Type:

Area: m

Station Address: Map

Telephone Number:

E-mail:

Postal Code:

Remark:

Save
Cancel

Select a point to be registered on the map.

When a point is selected on the map, its address will be obtained automatically.

Location Place

OK

Enter the following information in the registration screen.

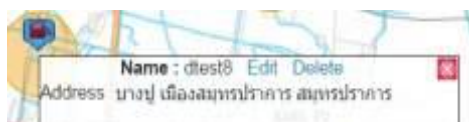
- ✓ Station Name
- ✓ Station Type Name
- ✓ Format Type *Select a circle or polygon.
- ✓ Area *Enter this column when a Format Type is a circle.
- ✓ Station Address
- ✓ Telephone Number
- ✓ E-mail
- ✓ Postal Code
- ✓ Remark

(16) Station Icon and Area Display

Displays a Station icon and an area on the map.



When clicking an icon on the map, name and address of the Station, Edit button, and Delete button will be displayed.



(17) Changing a screen size

Arrangement of the tracking screen can be changed.

【Screen1(default screen)】



“<” To Screen 3

“<” To Screen 2

“>” To Screen 4

【Screen 2, list screen】



“>” To Screen 3

【Screen 3 map, list screen】



“>” To Screen 1

“<” To Screen 2

“>” To Screen 5

【Screen 4 map, search screen】



“<” To Screen 5

“<” To Screen 1

【Screen 5, map screen】



“>” To Screen 4

“<” To Screen 3

(18) Icon Type

The button is displayed only for regulated vehicles (dangerous goods transport vehicles and trailer vehicles).
The color of the icons on the map when over speed occurs or legal speed over can be changed.

– Normal

The icons are displayed in yellow only when over speed occurs.

The icons are displayed in red only when legal over speed occurs.

– Alarm

All icons are displayed in yellow while over speed continues.

All icons are displayed in red while legal over speed continues.

2.8 Vehicle Performance Table

You can check the performance by vehicle.

2.8.1 Vehicle performance Table

The screenshot shows the 'Vehicle Cloud Service' interface. On the left, a sidebar contains search filters: (1) Date (05/2015), (2) Vehicle (All), (3) Search button, and (4) Cancel button. The main area displays the 'Vehicle Result' table. The table has columns: Vehicle Name, Service Count, Transit Time, Fuel (km/l), Mileage(km), Over Speed Count, Max Speed, Over RPM Count, Max RPM, Abrupt start count, and Sudden Accel count. The table lists data for 'tsk_kaitou', 'Fugiyama', and 'suzuki_san_2', along as 'Total' and 'Average' rows. At the bottom right of the table area is a red box labeled (5). In the top right corner of the table, there are two buttons: (7) CSV and (8) Print. A red box labeled (6) highlights the 'Fuel' column header.

Vehicle Name	Service Count	Transit Time	Fuel (km/l)	Mileage(km)	Over Speed Count	Max Speed	Over RPM Count	Max RPM	Abrupt start count	Sudden Accel count
tsk_kaitou	3	02:03:26	0.0	1047.1	14	104.7	11	2391	20	
Fugiyama	1	01:06:18	0.0	23.3	4	180.0	4	1368	4	
suzuki_san_2	1	00:00:54	0.0	180.0	0	11.0	0	1300	0	
Total	5	03:12:38		1250.4	18	-	15	-	24	
Average	1.7	01:04:12		416.80	6.0	-	5.0	-	8.0	

(1) Date Search

This is used to select the search period (year, month and date).

(2) Vehicle Name Search

This is used to select the search criteria for vehicles.

(3) Search Button

This is used to start a search.

(4) Cancel Button

This is used to abort the search.

(5) Service Performance Display Area

The service performances of the vehicles searched are displayed.

This is a list summarizing the services for a month. When you select a vehicle, the screen will shift to the Detailed Analysis.

The displayed items are configurable.

- Transit Time(★)
- Mileage
- Stop Time (Over 30min)
- Over Speed Count
- Over Speed Time
- Average Speed
- Max Speed
- Over RPM Count
- Over RPM Time
- Max RPM
- Abrupt Start Count
- Sudden Acceleration Count
- Abrupt Deceleration Count
- Idling Time
- Max Hours Exceeded
- Total Eval Score
- Total Eval Rank
- Safe Driving Eval Rank
- ECO Driving Eval Rank
- Safe Driving Eval Score
- ECO Driving Eval Score

- EXT Ch1-9 ON Count
- Refuel Amounts(★)
- Fuel Consumption(km/l)(★)

★ : Items always displayed.

(6) Daily Fuel Consumption Transition Graph.

Display a graph of fuel consumption daily transition in a month.

(7) CSV button

This is used to output the service performance table values to a CSV file.

(8) Print button

This is used to print the service performance table displayed on the screen.

2.8.2 Vehicle Detail Analysis

Vehicle Name	Driver Name	Service Start Time	Service End Time	Transit Time	Fuel Graph	Mileage(km)	Stop Time (30min over)	Over Speed Count	Over Speed Time	RPM Count	Over RPM Time
Vehicle A	Mr. HAY	2017-03-07 07:01:00	2017-03-07 07:03:00			0.0	00:00:00	0	00:00:00	0	00:00:00
Vehicle A	Mr. HAY	2017-03-07 07:04:00	2017-03-07 07:17:00			0.0	00:00:00	0	00:00:00	0	00:00:00

(1) Select Vehicle Detail Analysis Screen

The analysis will be displayed on this screen when you select a vehicle from the Service Performance.
The data of the vehicle selected by service is represented.
A vehicle name and a driver name will be displayed for each service.

When you want to analyze each of the services, either double clicking the service you want to analyze, or marking the left check box and pressing [Analysis] button (2) will shift the screen to the detailed analysis screen.

When making a multiple selection simultaneously, mark the boxes of all the services you want to analyze, and then press the [Analysis] button.

(2) Detail Analysis Button

This is used to shift to the Detail Analysis.

(3) CSV Button

This is used to output the service performance table values in a CSV file.

(4) Fuel Graph Button

This is used to shift to the Fuel Tank screen.
For the Fuel Tank screen, refer to 2.18.

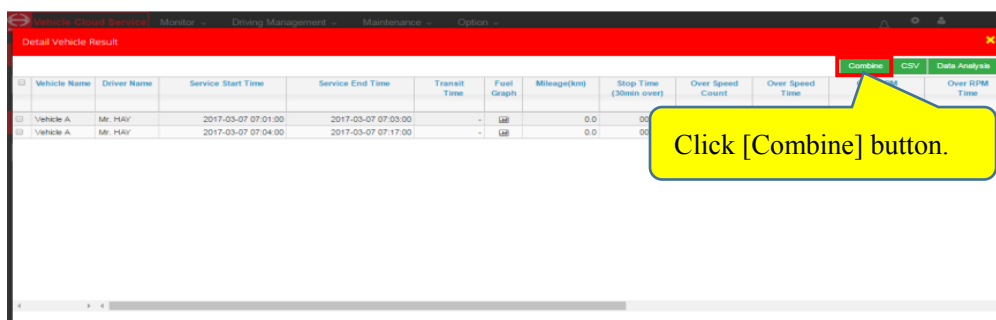
(5) Combine Button

With this function, the following operations can be performed.

- (i) Combine services.
- (ii) Change the point of combination of services.
- (iii) Cancel combination of services.

< Operation procedure >

- 1) Click [Combine] button.



2) Edit Vehicle Result pop-up screen

IN-OUT	Service Start Time	Service End Time	Driver Name
None	01-06-2017 06:41:00	01-06-2017 06:42:00	
IN	02-06-2017 06:41:00	02-06-2017 06:42:00	
OUT	03-06-2017 06:41:00	03-06-2017 06:42:00	
None	06-06-2017 06:41:00	06-06-2017 06:42:00	
IN	06-06-2017 06:46:00	06-06-2017 07:48:00	
None	06-06-2017 08:41:00	06-06-2017 08:42:00	
OUT	06-06-2017 09:30:00	06-06-2017 09:32:00	
IN	06-06-2017 10:41:00	06-06-2017 10:42:00	MR.sugiyama
OUT	06-06-2017 12:41:00	06-06-2017 12:42:00	MR.sugiyama
IN	06-06-2017 12:46:00	06-06-2017 12:48:00	
OUT	07-06-2017 12:46:00	07-06-2017 12:48:00	

(1) Vehicle name

Displays vehicle name.

(2) Start Date/End Date

This is used to select search period.

(3) Search Button

This is used to start a search.

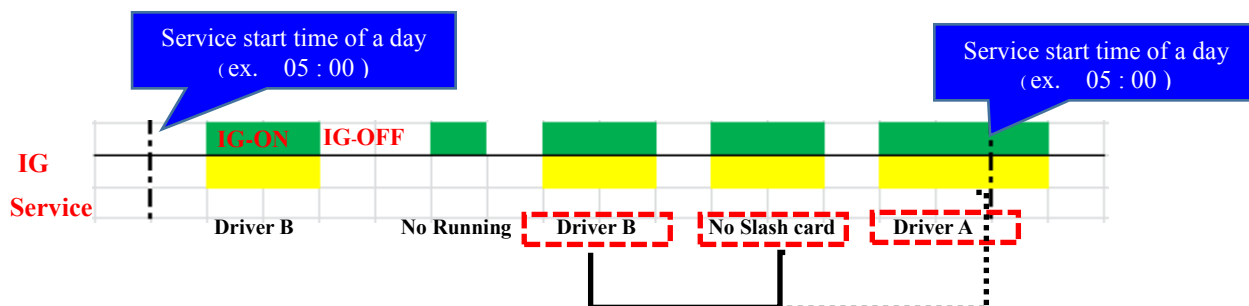
(4) IN/OUT Button List

Current combination start position (IN) and current combination end position (OUT) are displayed.

In order to change period of services to be combined, change the position of IN or OUT.
Change both IN and OUT to "None" to cancel combination.

The following services cannot be specified.

* Services which have different driver information cannot be combined.



(5)Start Date/End Date

Displays service information of the vehicles which can be combined.

The following information is displayed.

- Service Start Time
- Service End Time
- Driver Information

(6)Save Button

This is used to perform settings of service combination and driver.

After the services are combined, evaluation scores for the combined services are displayed.

(7)Cancel Button

This is used to cancel the settings of a service combination and a driver.

2.9 Driver Performance Table

You can check the drivers' performances.

2.9.1 Driver Performance Table

Driver Name	Service Count	Transit time	Mileage(km)	Total eval score	Safe driving eval score	ECO driving eval score	
MS.TEOD	2	02:34:53	155.8	83.2	74.9	83.2	A
MR.TESTGOOD	2	03:17:55	180.1	82.9	75.3	85.2	A
driver undefined	16	05:05:20	256.0	90.6	87.6	90.0	A
Total	21	12:58:17	713.6	-	-	-	-
Average	5.3	03:14:34	178.40	84.33	77.45	85.60	-

(1) Date Search

This is used to select the search period (year, month and date).

(2) Driver Name Search

This is used to select the search criteria by driver name.

(3) Search Button

This is used to start a search.

(4) Cancel Button

This is used to abort the search.

(5) Service Performance Display Area

The service performances searched are displayed.

This is a list summarizing the services for a month. When you select a vehicle, the screen will shift to the Detailed Analysis.

The displayed items are configurable.

- Transit Time(★)
- Mileage
- Stop Time (Over 30min)
- Over Speed Count
- Over Speed Time
- Average Speed
- Max Speed
- Over RPM Count
- Over RPM Time
- Max RPM
- Abrupt Start Count
- Sudden Acceleration Count
- Abrupt Deceleration Count
- Idling Time
- Max Hours Exceeded
- Total Eval Score
- Total Eval Rank
- Safe Driving Eval Rank
- ECO Driving Eval Rank
- Safe Driving Eval Score
- ECO Driving Eval Score
- EXT Ch1-9 ON Count

★ : Items always displayed.

(6) CSV Button

This is used to output the service performance table values in a CSV file.

(7) Print Button

This is used to print the service performance table displayed on the screen.

(8) Services which do not have driver information

“Driver Undefined” is displayed for services which do not have driver information.

For how to specify a driver for a service which does not have driver information,
refer to (9) Combine service index.

Patterns of services with/without driver information

	A mode which the license card is required.	A mode which the license card is not required.
Perform a service without slashing a card before.	Create a service without driver information	-
Perform a service after slashing a card.	Create a service with driver information	-
Default driver setting exists for a vehicle.	-	Create a service with driver information
Default driver setting does not exist for a vehicle.	-	Create a service without driver information
A plan has been created for a vehicle using the Delivery Plan.	-	Create a service with driver information
A plan has not been created for a vehicle using the Delivery Plan.	-	Create a service without driver information

*For how to set a default driver for the vehicle, refer to Section 3.3.3, Vehicle Setting.

*For how to set a Delivery Plan for a vehicle, refer to Section 2.4 Delivery Board and Training Plan,
(4) Add Plan button.

(9) Combine service index

The following operations can be performed using this function.

- (i) Specify a driver for a service which does not have driver information.
- (ii) Combine services which do not have driver information.

Then,

- * Reflect evaluation scores to the Driver Ranking screen.
- * Reflect the results to the actual result services by driver in the Driver Result screen.
- * The results of combined services can be checked on the Detailed Analysis screen.

<Operation procedure>

- 1) Select a service which does not have a driver specified.

Double-click a line of the service which does not have a driver information.

Driver Name	Service Count	Transit Time	Mileage(km)
MR. EASTGOOD...	3	03:10:23	113.6
MR. EASTGOOD...	1	00:03:59	2.9
MR. AUYYY	1	00:00:53	0.5
MR. TEYYY	1	00:04:43	2.2
MR. TEST	1	00:02:49	1.6
MR. TESTGOOD!!	2	02:57:50	96.1
MR. TEST	1	15:29:56	1059.7
Driver undefined	20	07:49:26	199.2
Total	30	29:39:59	1475.8
Average	3.8	03:42:29	16.0

Details of the service which does not have a driver information will be displayed as shown below. Click a logo of a Driver Name of the service to be combined.

Click a logo of the Driver Name.

Driver Name	Service Start Time	Service End Time	Transit Time	Mileage(km)	Total eval score	Safe driving eval score	ECO driving eval score
DEMO	2016-10-08 11:28:03	2016-10-08 11:34:03	00:16:28	12.5	80.1	96.9	100
DEMO	2016-10-08 13:38:56	2016-10-08 13:44:56	00:01:43	0.9	100.0	100.0	100
DEMO	2016-10-08 14:19:44	2016-10-08 15:10:46	00:03:57	1.5	100.0	100.0	100
DEMO	2016-10-08 19:20:30	2016-10-08 20:29:31	01:00:47	51.6	86.4	81.9	90
DEMO	2016-10-08 21:02:43	2016-10-08 21:40:30	00:11:46	4.2	100.0	100.0	100
DEMO	2016-10-09 00:17:51	2016-10-09 00:31:15	00:06:02	2.9	100.0	100.0	100
DEMO	2016-10-09 09:31:15	2016-10-09 11:27:04	01:26:04	101.1	85.1	80.3	94
DEMO	2016-10-09 11:28:03	2016-10-09 11:54:03	00:16:28	12.5	80.1	96.9	100
DEMO	2016-10-09 13:13:29	2016-10-09 13:20:29	00:06:09	2.9	98.0	41.6	50
DEMO	2016-10-09 13:38:56	2016-10-09 13:44:56	00:01:43	0.9	100.0	100.0	100
DEMO	2016-10-09 14:19:44	2016-10-09 15:10:46	00:03:57	1.5	100.0	100.0	100
DEMO	2016-10-09 19:20:30	2016-10-09 20:29:31	01:00:47	51.6	86.4	81.9	90
DEMO	2016-10-09 21:02:43	2016-10-09 21:40:30	00:11:46	4.2	100.0	100.0	100
DEMO	2016-10-11 14:19:44	2016-10-11 15:10:46	00:03:57	1.5	100.0	100.0	100
DEMO	2016-10-10 00:17:51	2016-10-10 00:31:15	00:06:02	2.9	100.0	100.0	100

Add a Driver name pop-up screen will be displayed.

2) Add a Driver name pop-up screen

(1) Vehicle name

Displays vehicle name.

(2) Start Date/End Date

This is used to select search period.

(3) Search Button

This is used to start a search.

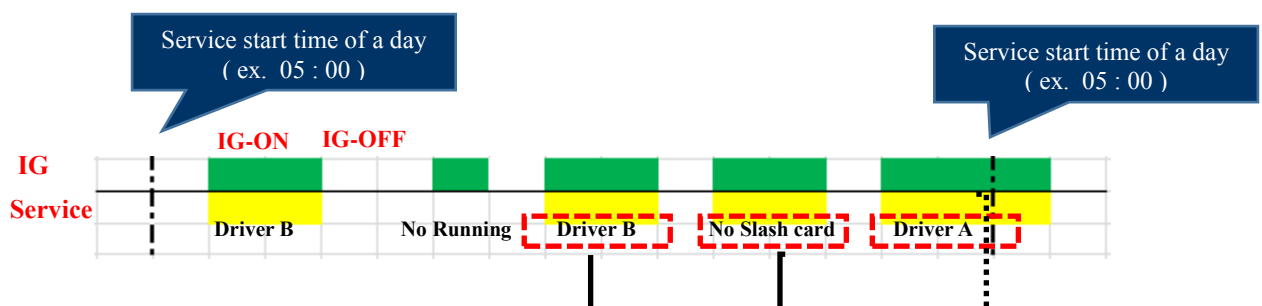
(4) Select a service to be combined

Select a service to be combined.

Select the Start time and the End time of the service to be combined.

The following services cannot be specified.

* Services which have different driver information cannot be combined.



(5) Service information

Displays service information of the vehicles which can be combined.

The following information is displayed.

- Service Start Time
- Service End Time
- Driver Information

(6) Driver name

Displays drivers of the company.

If the selected service has driver information, the information is displayed.

If a service which has driver information is selected, a driver cannot be selected.

(7) Save Button

This is used to perform settings of service combination and driver.

After the services are combined, evaluation scores for the combined services are displayed.

(8) Cancel Button

This is used to cancel the settings of a service combination and a driver.

2.9.2 Driver Detail Analysis

(1) <input type="checkbox"/>	Driver Name	Vehicle Name	Service Start Time	Service End Time	Transit time	Mileage(km)	Stop (30min over) (4)	Over Speed Count (2) (3)
<input type="checkbox"/>	Mr. HAY	Vehicle A	2016-12-07 07:00:00	2016-12-07 07:17:00	00:00:10	0.0	00:00:00	0
<input type="checkbox"/>	Mr. HAY	Vehicle A	2016-12-08 07:00:00	2016-12-08 07:17:00	-	10.0	00:00:00	0

(1) Select Vehicle Detail Analysis Screen

It will be displayed on this screen when you select a driver from Service Performance (5).

The data of the driver selected by service is represented.

A vehicle name and a driver name will be displayed for each service.

When you want to analyze each of the services, either double clicking the service you want to analyze, or marking left check box (8)-2 and pressing [Analysis] button (8)-1 will shift the screen to the Detailed Analysis screen.

When making a multiple selection simultaneously, mark the boxes of all the services you want to analyze, and then press the [Analysis] button.

(2) Detail Analysis Button

This is used to open the Detail Analysis.

(3) CSV Button

This is used to output the service performance table values in a CSV file.

(4) Combine Button

This is used to combine services.

< Operation procedure >

Select one service and click [Combine] button. “Add a Driver name pop-up screen” will be displayed.

Refer to 2.9.1 for operations after that.

Vehicle Name	Driver Name	Service Start Time	Service End Time	Time	Fuel Graph	Fuel Amount	Fuel Consumption (km/l)
ES-922	ES-922	25-10-2016 06:47:39	25-10-2016 08:56:02	00:05:39	0.0	0.0	-
ES-922	ES-922	25-10-2016 07:18:19	25-10-2016 15:00:43	01:32:56	0.0	0.0	-
ES-922	ES-922	26-10-2016 07:06:16	26-10-2016 11:00:00	00:00:00	0.0	0.0	-

2.10 Fuel Consumption Management

You can manage fuel consumption for each vehicle.

The screenshot shows the 'Fuel Consumption Management' screen. On the left, there is a sidebar with a date search (1), vehicle search (2), and search/cancel buttons (3, 4). The main area displays a table of fuel consumption data (5) with columns for vehicle name, class, ODO(km), mileage(km), and fuel consumption comparison. The table lists three vehicles (75-1234, 75-1465, 75-7701) and summary rows for Diesel and CNG. The interface also includes buttons for 'Edit Refuel' (7), 'Refuel Amounts' (8), 'CSV' (9), and 'Print'.

(1) Date Search

This is used to select the search period (year, month and date).

(2) Vehicle Name Search

This is used to select the search criteria for vehicles.

(3) Search Button

This is used to start a search.

(4) Cancel Button

This is used to abort the search.

(5) Fuel Consumption Display List

The fuel consumption list for each vehicles searched is displayed.

- Total Mileage (km)
- Refueling Amounts
- Refueling Amounts= Fuel Consumption Amount for CAN vehicles
- Average Fuel Consumption

Fuel consumption in comparison to previous month as well as in comparison to previous year are displayed.

(6) Fuel Consumption Graph Display

The Fuel Consumption Graph Display screen will appear. Either clicking the mark of a graph or double clicking the vehicle line you want to move to the Fuel Consumption Graph will shift to the Fuel Consumption Graph Display screen.

(7) Refuel Amounts Edit Button

This is used to shift to the Refuel Amounts Edit Screen.

(8) Input Refuel Amounts

This is used to shift to the Refuel Amounts input screen.

(9) CSV Button

This button is used to output the Fuel Consumption Display List in a CSV file.

(10) Select Vehicle

This is used to select the vehicle for which fuel consumption is entered in the pull-down menu.

(11) Refueling Date Input

This is used to enter the time of refueling and Refuel Amounts.

The 'Refuel Amounts' screen contains the following elements:

- (10) Vehicle dropdown menu (selected: HINO-DEMO)
- Fuel Type dropdown menu (selected: Diesel)
- (11) Refuel Time input field (2015-08-18 00:00)
- Refuel Amounts input field (100) and unit (Liter)
- Fuel Cost input field
- Table with columns: Vehicle Name, Service Start, Service End
- (13) Submit button

- (12) Select from Service History
Select Services with refueling from History.
- (13) Registration Button
This is used to register the fuel consumption.

< Edit Refuel Amounts >

The screenshot displays the 'Edit Refuel Amounts' interface. On the left is a sidebar with navigation options like 'Date' (showing 11/2015) and 'Vehicle'. The main area features a table with the following data:

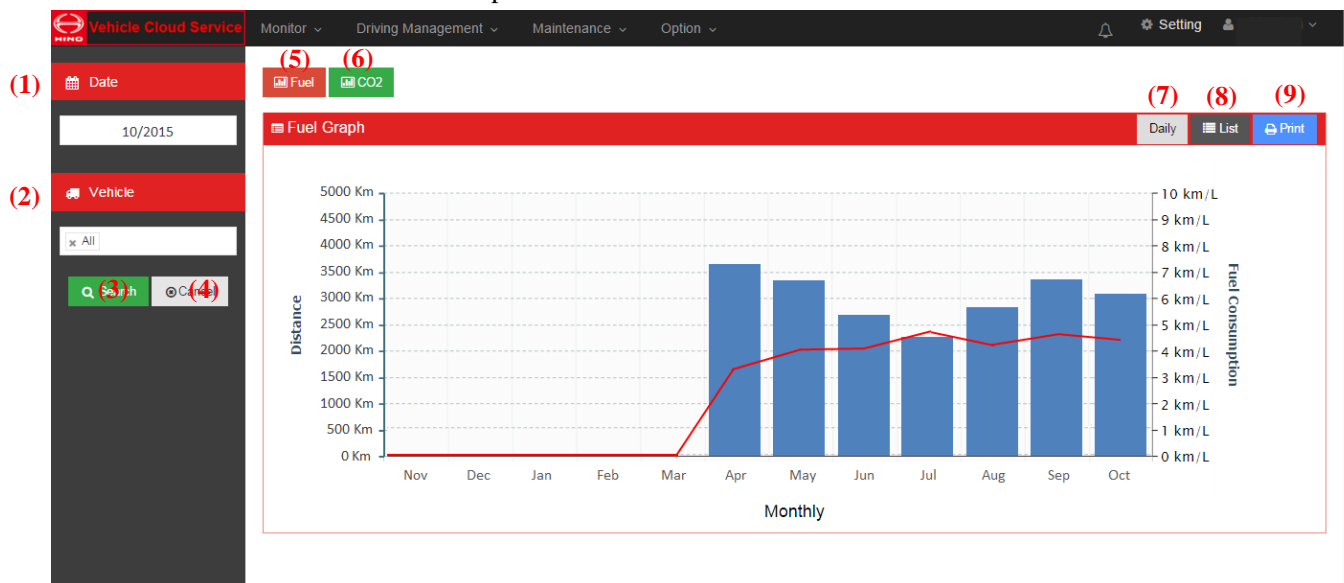
Vehicle Name	Refuel Time	Refuel Amounts	ODO(km)
Index_check	2015-01-03 13:40:00	7000	324545
Index_check	2015-01-02 10:33:00	670	324470
Total		7670	

At the top of the table area are buttons for 'New' (14), 'Edit' (15), and 'Delete' (16). To the right of the table are 'Submit' (18), 'CSV' (19), and 'List' (20) buttons. A large red box (17) encompasses the entire table area.

- (14) Add Refuel Amounts Button
Add refuel data. Open Enter Refuel Data screen.
- (15) Edit Refuel Amounts Button
Edit refuel data. Open Enter Refuel Data screen.
- (16) Delete Refuel Amounts Button
Delete Refuel data.
- (17) Refuel Data List
Display Refuel data. The following items are displayed.
- Driver name
 - Vehicle name
 - Refuel date
 - Refuel Amounts
 - Refuel ODO
- (18) Submit Button
Confirm entered refuel data. Aggregate entered refuel data.
- (19) CSV Button
This button is used to output the Fuel Consumption Display List in a CSV file.
- (20) List Button
This is used to shift to the Fuel Consumption Management Transition Table.
*If List button is pushed before pushing the Submit button, entered refuel data will not be aggregated.

2.10.1 Fuel Consumption Transition Graph

You can check the Fuel Consumption Transition.



(1) Date Search

This is used to select the search period (year, month and date).

(2) Vehicle Name Search

This is used to select the search criteria for vehicles.

(3) Search Button

This is used to start a search.

(4) Cancel Button

This is used to abort the search.

(5) Fuel Consumption Transition Button

This is used to shift to the Fuel Consumption Transition Graph.

(6) CO₂ Emission Graph

This is used to shift to the CO₂ Emission Graph.

(7) Daily Fuel Consumption Transition Graph.

Display a graph of fuel consumption daily transition in a month.

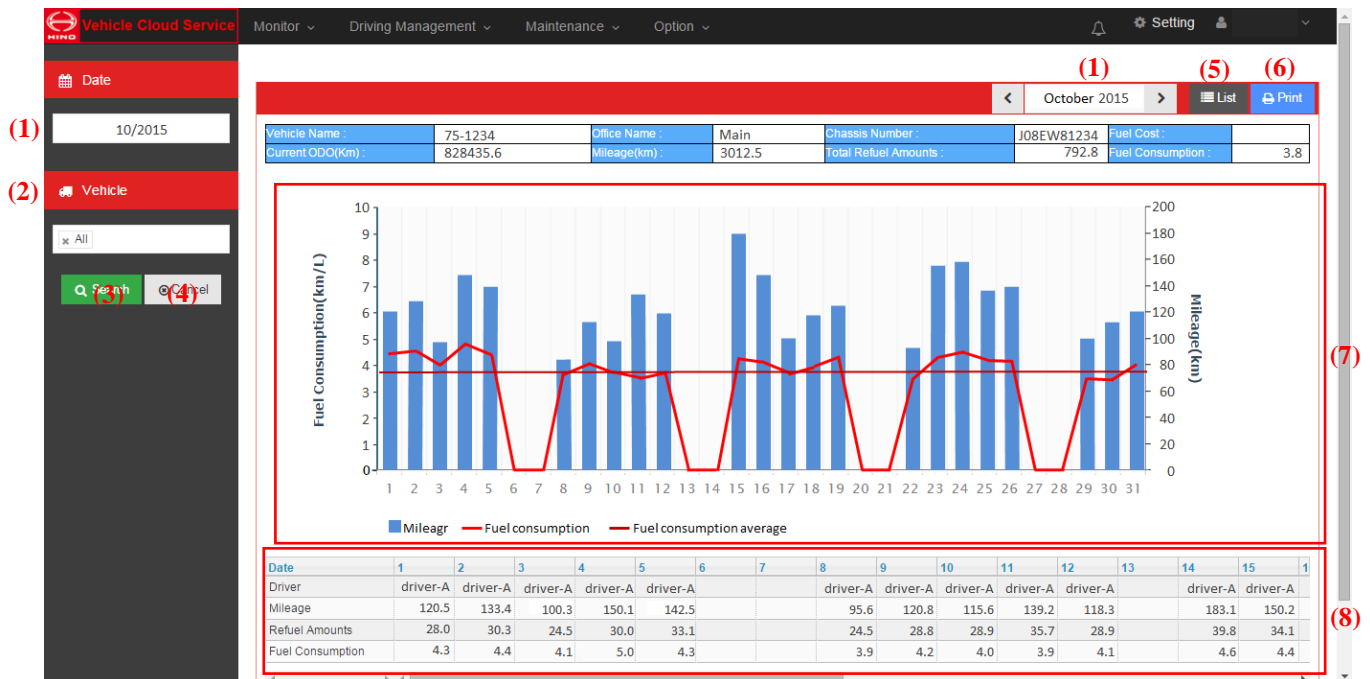
(8) List Button

This is used to shift to the Fuel Consumption Management Transition Table.

(9) Print Button

This is used to print the graph displayed on the screen.

2.10.2 Daily Fuel Consumption Transition Graph



(1) Date Search

This is used to select the search period (year and month).

(2) Vehicle Name Search

This is used to select the search criteria for vehicles.

(3) Search Button

This is used to start a search.

(4) Cancel Button

This is used to abort the search.

(5) List Button

This is used to shift to the Fuel Consumption Management Transition Table.

(6) Print Button

This is used to print the graph displayed on the screen.

(7) Daily Graph

- Mileage(km)
- Fuel Consumption
- Fuel Consumption Average

(8) Daily List

- Driver
- Mileage(km)
- Refuel Amounts
- Fuel Consumption

Click the date to shift to the Fuel Graph screen.

Daily fuel consumption of vehicles by fuel entries displays fuel consumption by calculating driving distance at every refueling.
When having driven for multiple days and refueled once at the end, total driving distance and fuel consumption is displayed on the refuel day.

Case 1: Daily refuel

Date	Mileage	Refuel	Fuel Consumption
10/3	100km	25L	4.0km/L
10/4	80km	16L	5.0km/L

Case 2: Refuel once for two days

Date	Mileage	Refuel	Fuel Consumption
10/3	100km	None	—
10/4	80km	41L	4.4km/L

How to calculate fuel consumption for Case 2: Mileage 180km / 41L = 4.4km/L

2.10.3 CO₂ Emission Graph

Based on fuel consumption, you can check the CO₂ Emissions as well as the transition.



(1) Date Search

This is used to select the search period (year, month and date).

(2) Vehicle Name Search

This is used to select the search criteria for vehicles.

(3) Search Button

This is used to start a search.

(4) Cancel Button

This is used to abort the search.

(5) Fuel Consumption Transition Button

This is used to shift to the Fuel Consumption Transition Graph

(6) CO₂ Emission Graph

This is used to shift to the CO₂ Emission Graph.

(7) List Button

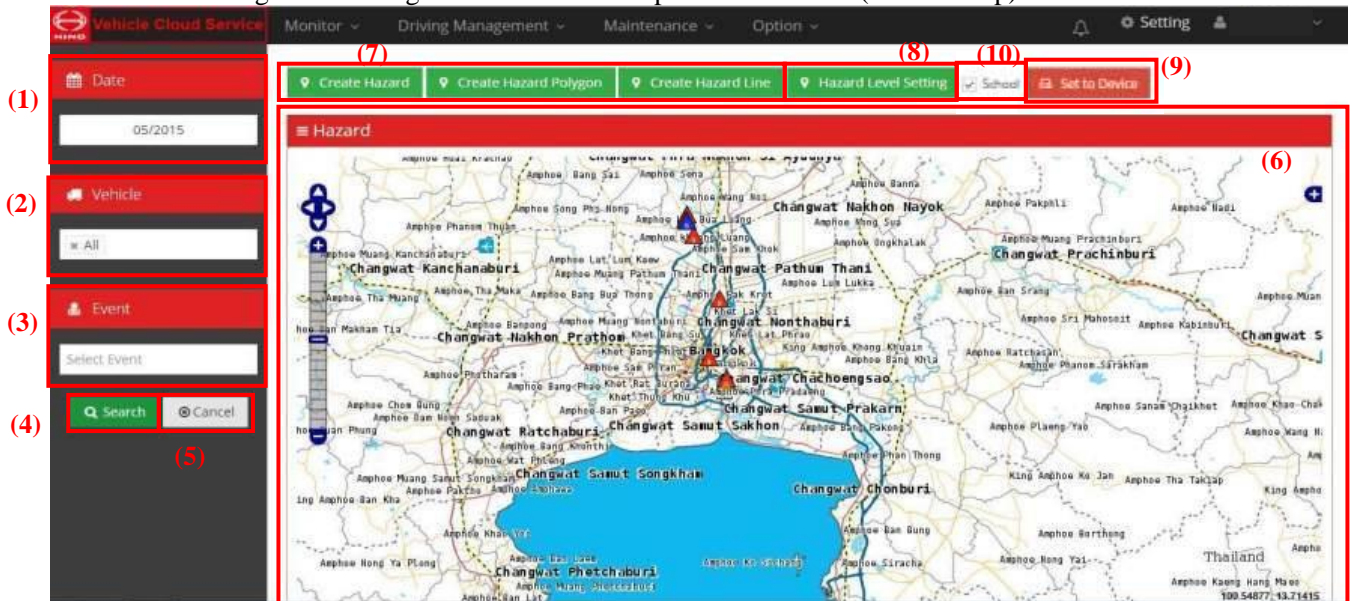
This is used to shift to the Fuel Consumption Management Transition Table.

(8) Print Button

This is used to print the graph displayed on the screen.

2.11 Hazard Map

You can register the dangerous locations and specified locations (Hazard Map).



(1) Date Search

This is used to select the search period (year, month and date).

(2) Vehicle Name Search

This is used to select the search criteria for vehicles.

(3) Event Type Search

This is used to select the search criteria by Event Type.

There are 4 event types: Abrupt Start, Sudden Acceleration, Abrupt Deceleration, and Prediction About Danger.

(4) Search Button

This is used to start a search.

(5) Cancel Button

This is used to abort the search.

(6) Information Display (Hazard Map)

The danger marks indicating the danger points on the map are displayed

The danger marks are color coded in 4 colors according to the number of occurrence times.

(7) Point Registration Button

This is used to shift to the screen in which position contentions are registered on the map.

Hazard points, polygon hazard points or lines can be registered.

(8) Aggregate Condition Registration of Hazard Register Points

This is used to shift to the aggregate Condition Registration screen of Hazard Register Points.

(9) Create Hazard File Button

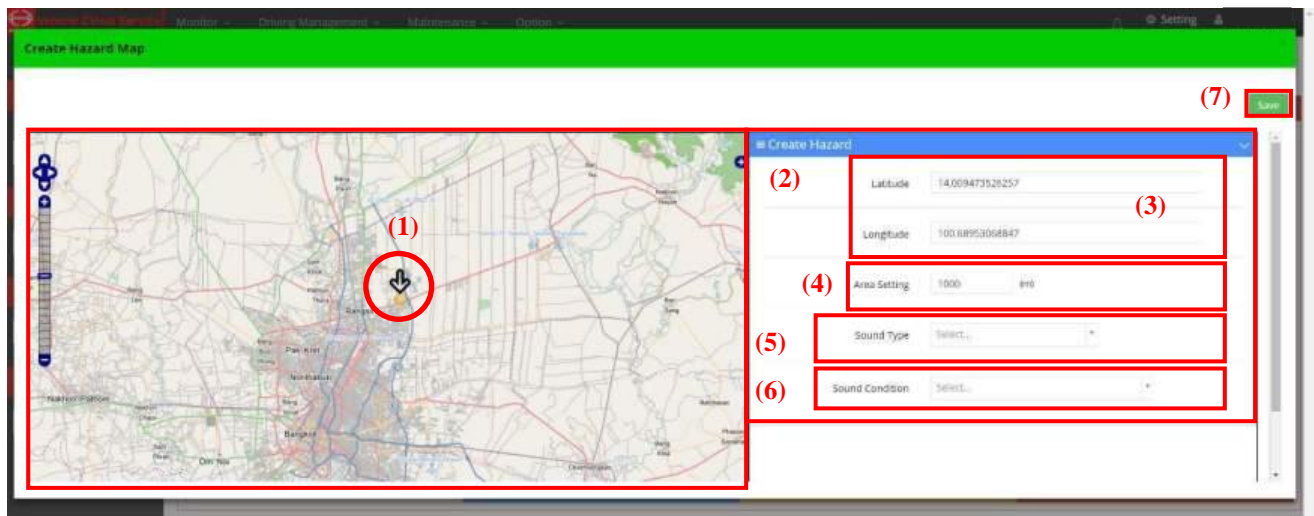
This is used to create a hazard file and send it to the onboard device.

(10) Show Points of Kindergartens and Schools

Check this setting and show Points of Kindergartens and Schools.

2.11.1 Create Hazard Map (Circle)

This is used to register dangerous locations and specified locations (Hazard Map).



(1) Hazard Point Registration

This is used to select the locations where hazardous points are registered on the map.

When clicking the location to be specified on the map, the mark "↓" will be appeared (inside the red ○ mark in the map), and the latitude and longitude values (3) in registration screen (2) will be changed reflecting the location.

(2) Hazard Point Registration Form

This is used to perform the registration of the latitude and longitude of the hazard positions selected on the map.

This form is also used to register the voice output.

(3) Latitude and Longitude Display

The latitude and longitude of the hazard positions selected on the map are displayed.

(4) Radius Settings of the Hazard Point Registration

This is used to set the radius of the Hazard Point Registration.

(5) Hazard Point Voice Setting

This is used to select and set the voice at the Hazard Point in the pull-down menu.

(6) Hazard Point Voice Setting (Continuous)

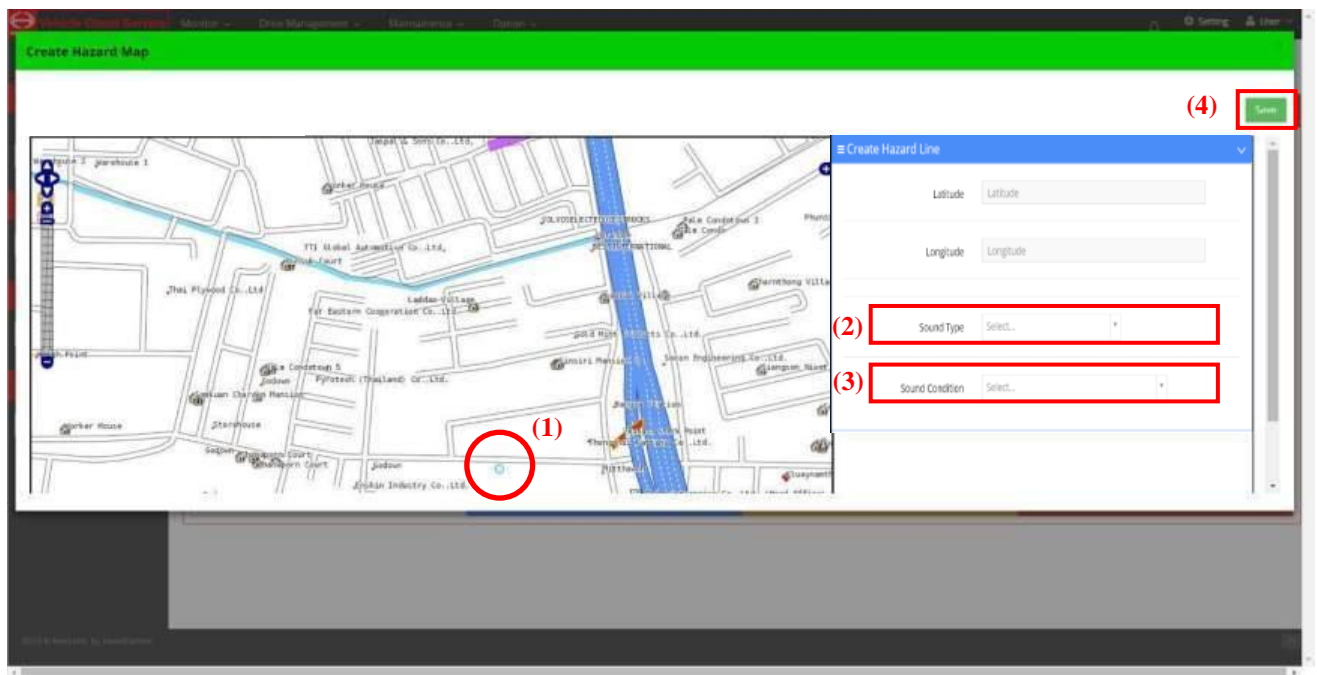
This is used to select a voice given at the selected Hazard Point from the pull-down menu.

(7) Registration Button

This is used to register the content you set in this screen.

2.11.2 Create Hazard Map (Polygon)

This is used to register dangerous locations and specified locations (Hazard Map).



(1) Hazard Point Registration

This is used to select the locations where Hazardous Points are registered on the map.

When clicking the location to be specified on the map, the mark "o" will be appeared (inside the red o mark in the map).

You need to use your mouse to create a polygon by using and moving the marks "o." (See (5)).

When modifying the polygon, simply select it. The color of the selected polygon changes to show it is modifiable. (See (6).)

(2) Hazard Point Voice Setting

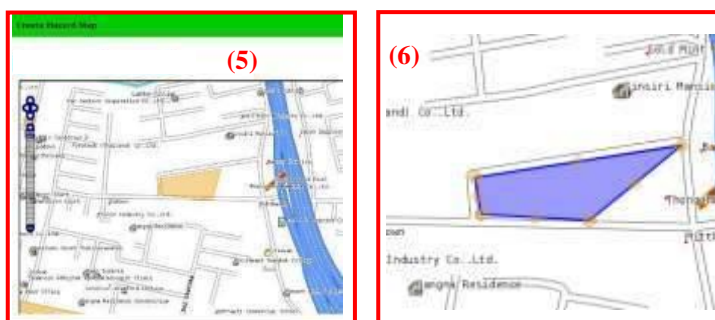
This is used to select and set the voice at the Hazard Point in the pull-down menu.

(3) Hazard Point Voice Setting (Continuous)

This is used to select a voice given at the selected Hazard Point from the pull-down menu.

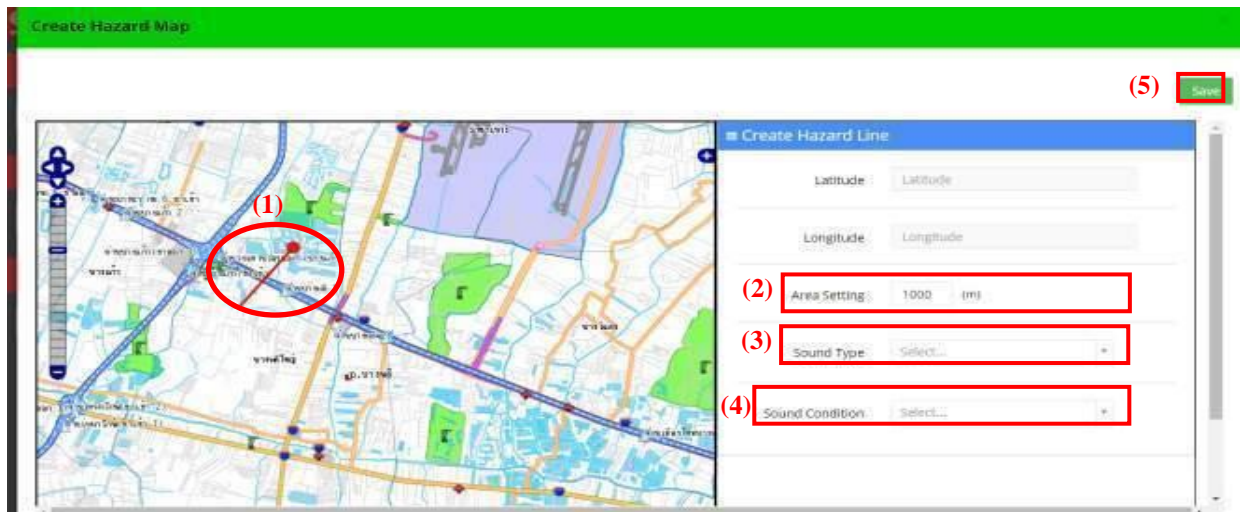
(4) Registration Button

This is used to register the content you set in this screen.



2.11.3 Create Hazard Map (Line)

This is used to register dangerous locations and specified locations (Hazard Map).



(1) Hazard Point Registration

This is used to select the locations where Hazardous Points are registered on the map.

You need to use your mouse to draw the registration point by using and moving the "●" on the map ("●" mark within the map).

(2) Radius Settings of the Hazard Point Registration

This is used to set the radius of the Hazard Point Registration

(3) Hazard Point Voice Setting

This is used to select and set the voice at the Hazard Point in the pull-down menu.

(4) Hazard Point Voice Setting (Continuous)

This is used to select a voice given at the selected Hazard Point from the pull-down menu.

(5) Registration Button

This is used to register the content you set in this screen.

2.11.4 Hazard Map Level Setting

This is used to set the level of importance of the points for which the dangerous locations and specified locations (Hazard Map) are to be registered.

The screenshot shows the 'Hazard Level Setting' window. It includes a 'Sum Points' table, an 'Entry Hazard Point To Vehicle' checkbox, an 'Entry School Area To Vehicle' checkbox, and a 'Point Per Number Of Occurrences' section with various driving behavior settings.

Sum Points	
Level 4	44 point ~
Level 3	35 point ~
Level 2	30 point ~
Level 1	1 point ~

Entry Hazard Point To Vehicle: ☐

Entry School Area To Vehicle: ☒ (4)

Point Per Number Of Occurrences

Abrupt Start	3	Sudden Acceleration	15	Abrupt Deceleration	25	Prediction About Danger	35
--------------	---	---------------------	----	---------------------	----	-------------------------	----

(1) Hazard Level Setting

A risk is set in automatically registering the Hazards.

The risk is determined by the total value of the items in driving behaviors (2).

(2) Weight Setting

This is used to weigh the risk of the items in automatically registering the hazards.

(3) Registration Button

This is used to register the content you set in this screen.

(4) Send Points of Kindergartens and Schools

Register data of points of kindergartens and schools in the hazard file to be set in the onboard device.

Check this setting and click 2.11 (9) Create Hazard File button.

Data of kindergartens and schools will be stored in the hazard file and sent to the onboard device.

When the onboard device with the hazard file approaches kindergarten or school, an alarm is raised to call attention to the driver.

2.12 Training

You can check the Training mode plan and actual.

The screenshot displays the 'Training' section of the Vehicle Cloud Service interface. On the left, a sidebar contains search filters: (1) Date (set to 05/2015), (2) Driver (set to F All), (3) Search button, and (4) Cancel button. The main area shows a table of training results, with (5) indicating the table itself. The table has columns for Driver, Before Last Time, Positive (+), Negative (-), Last Time, Positive (+), Negative (-), This Time, Positive (+), Negative (-), and Next Time. The table lists various drivers and their training sessions, including dates and results. On the right side of the table, there are three buttons: (6) Planning, (7) CSV, and (8) Print.

(1) Date Search

This is used to select the search period (year, month and date).

(2) Driver Name Search

This is used to select the search criteria by Driver Name.

(3) Search Button

This is used to start a search.

(4) Cancel Button

This is used to abort the search.

(5) Training Result Table

The Training Results are displayed.

- The display content includes the following items.
- Training Date and Time
- Driver Number
- Driver Name
- Vehicle Number
- Training Results

When you want to browse the Training Details, double clicking the driver's row you want to browse will shift to the Training Detail screen.

(6) Planning Button

This is used to shift to the Create Plan screen of the training.

(7) CSV Button

This is used to output the Training Result Table in a CSV file.

(8) Print Button

This is used to print the graph displayed on the screen.

2.12.1 Training Plan

You can check the plan in the Training mode.

The screenshot shows the 'Training' section of the 'Vehicle Cloud Service' application. A modal window titled 'Add Planing' is open, allowing users to create a new training plan. The modal contains the following fields:

- (1) Driver: A dropdown menu labeled 'Select Driver'.
- (2) Vehicle: A dropdown menu labeled 'Select Vehicle'.
- (3) Start Time: A date and time picker set to '2015-5-20 00:00'.
- (4) End Time: A date and time picker set to '2015-5-20 23:59'.
- (5) Submit: A green button with a plus icon and the text 'Submit'.

The background table displays training records with the following columns: Driver, Before Last Time, Positive, and Negative. The table contains several rows of data, including entries for 'MR. A', 'MR. T', and 'MR. T'.

(1) Driver Registration

This is used to register the drivers who will be trained.

You can select from the pull-down menu.

(2) Vehicle Registration

This is used to register the vehicle with which to provide the training.

You can select from the pull-down menu.

(3) Start Date and Time Registration

This is used to register the year / month / date / time to start the training.

The start time and end time are registered.

(4) End Date and Time Registration

This is used to register the year / month / date / time to end the training.

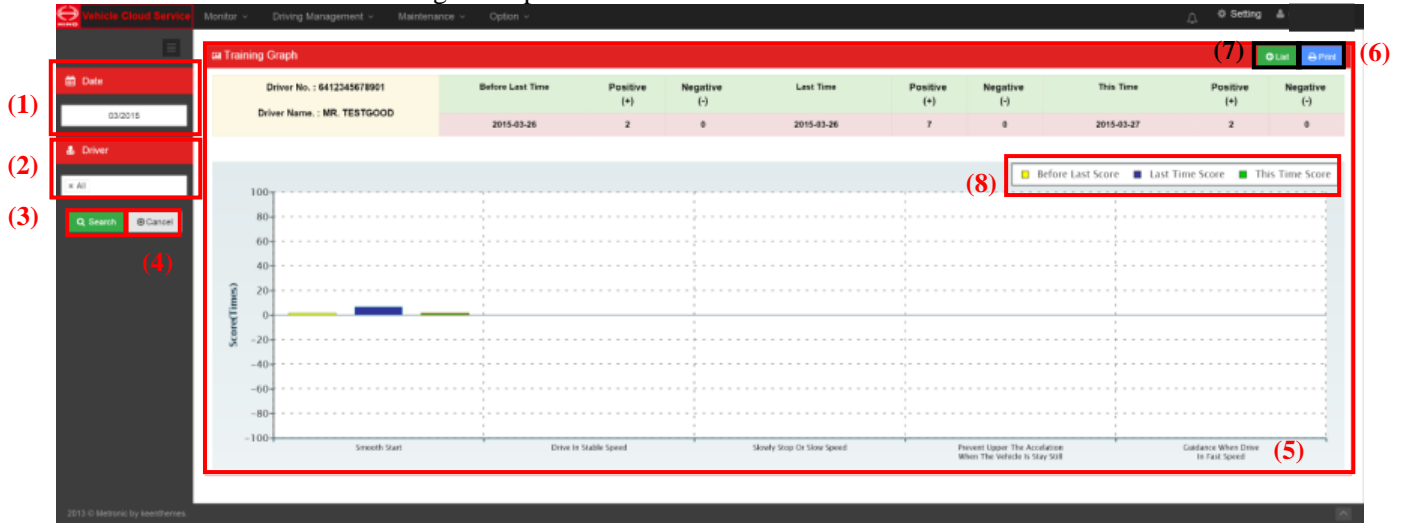
The start time and end time are registered.

(5) Registration Button

This is used to register the training plan.

2.12.2 Training Details

You can check the Training mode performance.



(1) Date Search

This is used to select the search period (year, month and date).

(2) Driver Name Search

This is used to select the search criteria by Driver Name.

(3) Search Button

This is used to start a search.

(4) Cancel Button

This is used to abort the search.

(5) Training Result Table

The Training Results are displayed.

The last result (dark blue) and the result of the time before the last (yellow), as well as the result of this time (green) are displayed.

(6) Print Button

This is used to print the Training Results Table.

(7) List Button

This is used to shift to the Training Results Table.

(8) Legends

These are the legends used in the training results

You can toggle the hide / show status of the items selected by clicking a legend.

2.13 Emergency Information History

You can check the history of the danger emergency information.

No.	Date	Vehicle Name	Event Name	Event	Place
1	03-08-2015 21:59:14	99900074		EXT ch Alarm	----
2	03-08-2015 21:59:26	99900074		EXT ch Alarm	----
3	03-08-2015 22:01:38	99900074		EXT ch Alarm	----
4	03-08-2015 21:53:28	99900074		EXT ch Alarm	----
5	04-08-2015 18:42:58	YAZAC-ayak	MR. KUBOCHH	Over Temperature	----
6	04-08-2015 18:52:37	YAZAC-ayak	MR. KUBOCHH	Over Temperature	----
7	04-08-2015 18:55:41	YAZAC-ayak	MR. KUBOCHH	Over Temperature	----
8	04-08-2015 18:48:51	YAZAC-ayak	MR. KUBOCHH	Over Temperature	----
9	04-08-2015 18:46:45	YAZAC-ayak	MR. KUBOCHH	Over Temperature	----
10	04-08-2015 18:55:40	YAZAC-ayak	MR. KUBOCHH	Over Temperature	----
11	04-08-2015 18:46:44	YAZAC-ayak	MR. KUBOCHH	Over Temperature	----
12	04-08-2015 18:52:38	YAZAC-ayak	MR. KUBOCHH	Over Temperature	----
13	03-08-2015 17:44:50	stbuki	MR. KUBOCHH	Hazard Violation	(Sinh) Nà Bang Nà Bangkòk
14	10-08-2015 18:27:08	stbuki		Hazard Violation	(Sinh) Nà Bang Nà Bangkòk
15	03-08-2015 18:47:56	stbuki	MR. KUBOCHH	Hazard Violation	(Sinh) Nà Bang Nà Bangkòk
16	10-08-2015 18:48:50	stbuki		Hazard Violation	(Sinh) Nà Bang Nà Bangkòk
17	03-08-2015 21:14:57	stbuki	MR. KUBOCHH	Hazard Violation	(Sinh) Nà Bang Nà Bangkòk
18	03-08-2015 21:51:58	stbuki	MR. KUBOCHH	Hazard Violation	(Sinh) Nà Bang Nà Bangkòk
19	10-08-2015 18:27:08	stbuki		Hazard Violation	(Sinh) Nà Bang Nà Bangkòk
20	10-08-2015 18:53:16	stbuki		Hazard Violation	(Sinh) Nà Bang Nà Bangkòk

(1) Date Search

This is used to select the period (year and month) to search.

(2) Vehicle Search

This is used to select the search criteria for vehicles.

(3) Event Search Button

This is used to select the search criteria for the events. All the events are as described below:

- SOS Information
- EXT Alarm
- Abrupt Start
- Sudden Acceleration
- Abrupt Deceleration
- Prediction About Danger
- Analog Alarm
- Start without "Service-IN"
- Over Speed
- Hours Exceeded
- Idling (Idling Alarm)
- (Law) Over Speed
- (Law) Hours Exceeded
- (Law) No License Reading
- (Law) Notice of Vehicle No Signal
- Hazard (Position Contention)
- Fuel Tank1 Alarm
- Fuel Tank2 Alarm

(4) Search Button

This is used to start the search.

(5) Cancel Button

This is used to abort the search.

(6) Search Results List Display

The Emergency information history of the vehicle searched is displayed.

- Date and time of occurrence
- Vehicle Number
- Driver Name
- Event Name
- Place of Occurrence

When you want to perform the Detailed Analysis, clicking the Date and Time, Vehicle Name, Driver Name, and others (Lines) that you want to analyze in details will shift to the detail screen.

(7) CSV Button

This button is used to output the Emergency History Information List in a CSV file.

2.14 Station report

Check Station reports with this function.
Create reports between registered Stations.

Start point: Point of a registered Station where the vehicle ignition is turned on.

Or point where the vehicle starts moving after stopping for more than 2 minutes.

Finish point: Point of a registered Station where the vehicle ignition is turned off.

Or point where the vehicle stops for more than 2 minutes.

The screenshot shows the 'Station Report' window. On the left is a sidebar with search filters, and on the right is a table of report data. Red boxes and numbers highlight specific features:

- (1) Date From: 2016-11-16 00:00
- (2) Date To: 2016-11-18 23:59
- (3) Vehicle: All
- (4) Driver: Select Driver
- (5) Station Type: Select Station Type
- (6) Station: Select Station
- (7) Search and Cancel buttons at the bottom of the sidebar.
- (8) The main data table with columns: No., Vehicle Name, Station Point Name, Arrival Driver Name, Arrival Time, Arrival Point Name, Duration, Distance, Amount of Fuel, and Vehicle.
- (9) CSV button
- (10) Print button
- (11) A vertical column of checkboxes on the right side of the table.

No.	Vehicle Name	Station Point Name	Arrival Driver Name	Arrival Time	Arrival Point Name	Duration	Distance	Amount of Fuel(L)	Vehicle
1	Test Vehicle	USA office		2016-11-16 09:05:41	NASA office	00:01:16	0.20	0.00	
2	Test Vehicle	USA office		2016-11-16 18:39:12	TEST1	00:24:36	93.20	0.00	
3	Test Vehicle	ST1		2016-11-16 20:05:38	Citadines	00:19:16	18.10	0.00	
4	Test Vehicle	address		2016-11-16 20:48:39	TEST1	00:37:58	22.30	0.00	
5	Test Vehicle	ST1		2016-11-17 07:42:27	Citadines	10:44:41	22.90	0.00	
6	Test Vehicle	address		2016-11-17 11:56:39	NASA office	03:52:05	37.40	0.00	
7	Test Vehicle	ST1		2016-11-17 18:36:57	TEST2	00:18:02	0.10	0.00	
8	Test Vehicle	ST2		2016-11-17 19:38:38	TEST3	00:39:21	9.60	0.00	
9	Test Vehicle	ST3		2016-11-18 07:39:36	Citadines	12:00:01	38.60	0.00	
10	Test Vehicle	address		2016-11-18 08:24:44	TEST1	00:24:49	7.70	0.00	
11	Test Vehicle	ST1		2016-11-18 09:10:51	TEST1	00:45:13	5.50	0.00	

(1) Time Search(From/To)

This is used to specify a period for the search of the arrival time at the Station.

Search for reports of vehicles arrived at the Station between the dates set in From and To boxes.

(2) Vehicle Search

This is used to set vehicle search criteria.

All Vehicles or Select Individual Vehicles can be set.

(3) Driver Search

This is used to set driver search criteria. Search for a driver at the time of arrival at the Station.

All Drivers or Select Individual Drivers can be set.

(4) Station Type Search

This is used to set Station Type search criteria. Search for a Station Type at the time of arrival.

All Station Types or Select Individual Station Types can be set.

(5) Station Search

This is used to set Station search criteria. Search for a Station at the time of arrival.

ALL Stations or Select Individual Stations can be set.

(6) Search Button

This is used to perform search based on the search conditions set.

Set (1) Time Search and select one search condition for each item from (2) to (5).

(7) Cancel Button

This is used to abort the search.

(8) Display search results

Displays search results.

The following items will be displayed.

- displays the Vehicle name
- Driver name at the departure
- Departure time
- Departure point (Station name)
- Driver name at the arrival
- Arrival time
- Arrival point (Station name)
- Required time (difference between the departure time and the arrival time)
- Traveling distance (distance between the departure point and the arrival point)
- Fuel consumption amount (Amount of fuel consumed between the departure point and the arrival point)
- Vehicle Path Button

(9) CSV button

This is used to output the search results to a CSV file.

(10) Print Button

This is used to print the search results.

(11) Vehicle Path Button

This is used to display the Vehicle Path screen.

The path between the departure point and the arrival point will be displayed.

2.15 DLT Report

This screen displays DLT Reports which are created when a DLT alarm is generated.

DLT Report

No.	Report name	End Time	end point	Duration	Max Speed	Vehicle Path
1	Over 8hour run...	2018-05-02 10:36:30	Muang Samut Sakhon,...	55:33:20	120	
2	Over 8hour run...	2018-05-03 10:36:30	Muang Samut Sakhon,...	55:33:20	120	
3	Over 8hour run...	2018-05-04 10:36:30	Muang Samut Sakhon,...	55:33:20	120	
4	Over 8hour run...	2018-05-05 10:36:30	Muang Samut Sakhon,...	55:33:20	120	
5	Over 8hour run...	2018-05-06 10:36:30	Muang Samut Sakhon,...	55:33:20	120	
6	Over 8hour run...	2018-05-07 10:36:30	Muang Samut Sakhon,...	55:33:20	120	
7	Over 8hour run...	2018-05-08 10:36:30	Muang Samut Sakhon,...	55:33:20	120	
8	No Driver	2018-05-08 07:09:24	-,-,-	00:05:10	0	
9	No Driver	2018-05-08 07:59:19	-,-,-	00:00:00	26	
10	No Driver	2018-05-08 09:43:47	-,-,-	00:00:00	20	
11	No Driver	2018-05-08 12:00:00	Samut Sakhon,Muang ...	00:14:16	86	
12	Law Over speed	2018-05-08 12:13:57	-,-,-	00:23:44	86	
13	No Driver	2018-05-08 12:21:06	-,-,-	00:07:05	0	

(1) Time Search(From.To)

This is used to set a duration in which a DLT alarm is generated. This is used to select the search criteria for DLT Reports which are created between "From" and "To".

(2) Vehicle Name Search

This is used to select the search criteria for vehicles.

(3) Driver Name Search

This is used to select the search criteria by driver name.

(4) Report type

This is used to select the search criteria by a type of DLT alarm.

-Law Over speed

-In correct Driver report (A driver who did not have a license drove.)

-No Driver report (A driver drove without slashing a license card.)

-No GPS BOX report (There was no communication in the device for more than four hours.)

-Over 4hour running report

(A driver drove for more than four hours without taking a rest for more than thirty minutes.)

-Over 8 hour running report (A driver drove for more than eight hours in one day.)

(5) Search Button

This is used to start a vehicle search.

Set (1) Time Search and select one search condition for each item from (2) to (4).

(6) Cancel Button

This is used to abort the vehicle search.

(7) Display search results

Displays search results.

The following items will be displayed.

- Report Name
- Vehicle Name
- Vehicle License No.
- Vehicle Province
- Driver Name
- Driver No.
- Driver Type
- Start time
- Start Point
- End time
- End Point
- Duration(Duration between "Start Time" and "End Time")
- MAX speed(Maximum speed in the Report)
- Vegucle Path button

(8) Vehicle Path Button

This is used to display the Vehicle Path screen.

A path between "Start point" and "End point" is displayed.

(9) CSV button

This is used to output the search results to a CSV file.

(10) Print Button

This is used to print the search results.

2.16 Vehicle Status Check (Maintenance Information)

(7) (8) (9)

The screenshot shows the 'Vehicle Check' screen. On the left sidebar, there are four buttons: 'Vehicle' (1), 'Alarm' (2), 'Search' (3), and 'Cancel' (4). The main area is a table titled 'Vehicle Check' with columns for various maintenance items. A red box (5) highlights the 'Maintenance Setting' button in the top right. Another red box (6) highlights a specific vehicle row in the table.

Vehicle Number	Vehicle Name	Current ODO(km)	Periodical Check	Oil	Oil Filter	Transmission Oil	Differential Gear Oil	Spark Plug	Timing Belt	Air Cleaner Element	Brake Liquid	Coolant
00009922	OTC-Tee	-	0 km									
1	OTC-Tee	-	0 km									
11111111	ota2	2015-03-02	41.5 km									
11223344	su2aki-kan	2015-05-05	0 km	2015-04-23	2015-04-23	2015-04-23	2015-04-23	2015-04-23	2015-04-23	2015-04-23	2015-04-23	2015-04-23
22222222	Osaka	2015-03-02	0 km									
33333333	Osaka	2015-03-19	0 km	2015-03-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09
44444444	Ono	2015-03-19	0 km	2015-03-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09
55555555	F-figgyam	2015-05-19	32.5 km	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09	2015-04-09
66666666	hish	-	0 km									
77777777	lucky T lucky T L...	2015-04-28	0 km	2015-04-23	2015-04-23	2015-04-23	2015-04-23	2015-04-23	2015-04-23	2015-04-23	2015-04-23	2015-04-23
88888888	QA—QKA	-	0 km									
92009001	ysary	2015-02-03				2015-02-03					2015-02-03	

(1) Vehicle Search

This is used to select the search criteria for vehicles.

(2) Alarm Search

This is used to search for the vehicles on which an alarm has occurred.

(The mileage has reached the distance at which the vehicle must be replaced.)

(3) Search Button

This is used to start a vehicle search.

(4) Cancel Button

This is used to abort the vehicle search.

(5) Maintenance Status

The following items on the maintenance status of the vehicles are displayed.

- Oil
- Oil Filter
- Transmission Oil
- Air Cleaner Element
- Brake Fluid
- Clutch
- Brake Lining,
- Fan Belt
- Coolant
- Spark Plug
- Timing Belt
- Differential Gear Oil
- Tire

(6) Vehicle Status Check (Maintenance Information) Detail Screen

Click a vehicle to check the condition (maintenance information), and Vehicle Status Check (maintenance information) Details screen (7) will appear.

The details of a replacement part can be browsed and updated.

(7) Maintenance Setting Button

This is used to shift to the screen in which the maintenance setting is performed.

(8) CSV Button

This is used to send the maintenance information list in a CSV file.

(9) Print Button

This is used to print the maintenance Information list.

2.16.1 Replacement Parts Information Screen

The screenshot shows the 'Change Parts Information' modal window. It contains a table for vehicle details, a 'Periodical Check' checkbox, a table for various vehicle components, and a 'Maintenance Information' section with a search bar and a table for recording maintenance history.

Callout (1): Points to the vehicle details table.

Vehicle Number	Vehicle Name	Date	ODO
92000002	ES-910-0002	2014-08-15 06:52:57	632221.6 Km

Callout (2): Points to the 'Periodical Check' checkbox.

Callout (3): Points to the table of vehicle components.

Oil	Oil Filter	Transmission oil	Differential gear's oil	Spark plug	Timing belt	Air cleaner element	Brake liquid	Coolant	Tire	Brake Lying	Clutch	Fan belt
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2014-08-15			2014-08-15									
23900 Km			2300 Km									

Callout (4): Points to the 'Maintenance Information' section.

Callout (5): Points to the 'UPDATE' button.

(1) Most current vehicle status of the vehicle selected

The date and time as well as the ODO value are displayed.

(2) Periodic Inspection Check Box

When the periodic inspection is performed, marking this box will update the date and time as well as the ODO value.

(3) Maintenance Check Box

When the vehicle inspection is performed (when the inspected parts of the relevant vehicle are replaced), [marking] this box will update the date and time as well as the ODO value.

(4) Maintenance Information Box

The maintenance information that is not described in (3) can be recorded.

(5) Update Button

This is used to save the data updated.

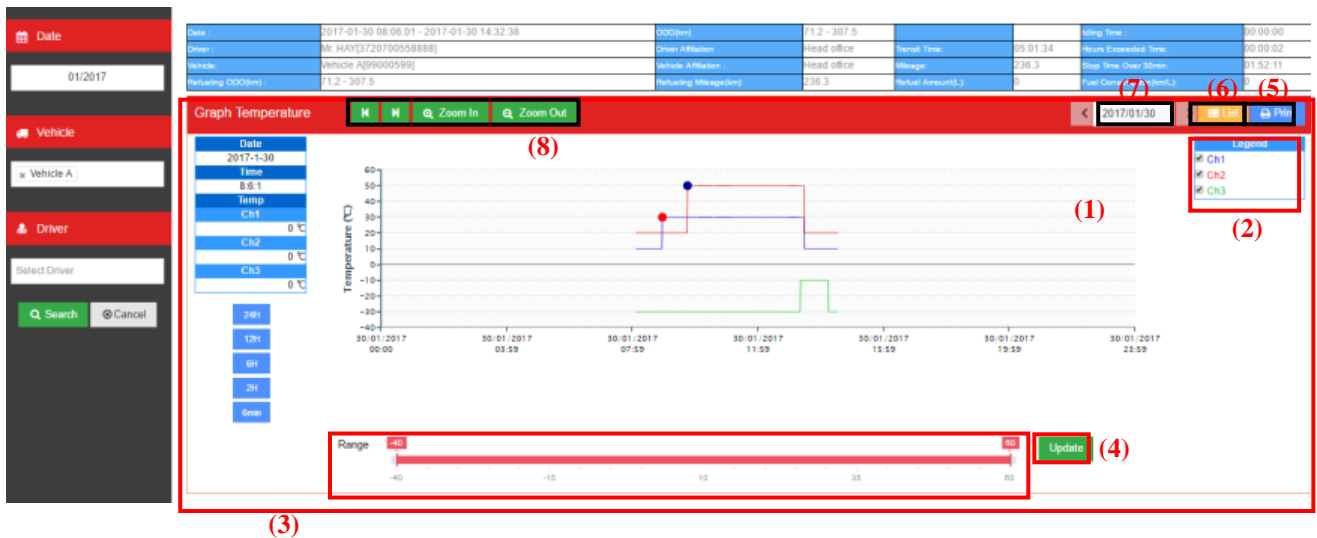
2.17 Temperature Management

The screenshot shows the 'Temperature' management screen in the Vehicle Cloud Service. The sidebar on the left contains filters for Date, Vehicle, and Driver. The main area displays a table of search results with columns for Vehicle Name, Driver Name, Period, Mileage(km), and Transit Time. A 'Data Analysis' button is located in the top right corner of the table area.

Vehicle Name	Driver Name	Period	Mileage(km)	Transit Time
otsuki	MR. TESTGOOD	02-08-2558 16:50 - 02-08-2558 17:43	0	00:01:18
otsuki	MR. TESTGOOD	02-08-2558 18:08 - 02-08-2558 18:11	0	00:02:01
otsuki	MR. TESTGOOD	02-08-2558 18:56 - 02-08-2558 19:02	0	00:06:02
otsuki	MR. TESTGOOD	02-08-2558 19:02 - 02-08-2558 19:05	0	00:03:59
otsuki	MR. TESTGOOD	02-08-2558 20:26 - 02-08-2558 20:27	0	00:01:00
otsuki	MR. TESTGOOD	02-08-2558 20:47 - 02-08-2558 21:43	0	00:05:18
otsuki	MR. TESTGOOD	02-08-2558 21:44 - 02-08-2558 23:22	0	00:13:17
otsuki	MR. TESTGOOD	02-08-2558 23:23 - 02-08-2558 23:30	0	00:07:01
otsuki	MR. TESTGOOD	02-08-2558 23:46 - 02-08-2558 23:51	0	00:04:02
otsuki	MR. TESTGOOD	02-08-2558 23:52 - 03-08-2558 00:00	0	00:06:43
otsuki	MR. TESTGOOD	03-08-2558 00:00 - 03-08-2558 00:08	0	00:06:02
otsuki	MR. TESTGOOD	03-08-2558 00:10 - 03-08-2558 00:15	0	00:05:01
otsuki	MR. TESTGOOD	03-08-2558 00:15 - 03-08-2558 00:21	0	00:06:01
otsuki	MR. KUBOCHHI	03-08-2558 10:06 - 03-08-2558 10:12	0	00:05:02
otsuki	MR. KUBOCHHI	03-08-2558 10:12 - 03-08-2558 10:25	0	00:11:04
otsuki		03-08-2558 15:13 - 03-08-2558 15:23	0	00:08:58
otsuki	MR. TESTGOOD	03-08-2558 15:30 - 03-08-2558 16:24	0	00:52:22
otsuki		03-08-2558 16:31 - 03-08-2558 16:35	0	00:04:02

- (1) Date Search
This is used to select the period (year and month) to search.
- (2) Vehicle Search
This is used to select the search criteria for Vehicles.
- (3) Driver Name Search
This is used to select the search criteria by Driver Name.
- (4) Search Button
This is used to start a vehicle search.
- (5) Cancel Button
This is used to abort the vehicle search.
- (6) Information Display
The search results are displayed.
 - Service Date (year, month and date)
 - Vehicle Name
 - Driver Name (Crew Name)
 - Mileage
 - Transit Time
- (7) CSV Button
This button is used to output the Search Results Table in a CSV file.
- (8) Graph Display Button
This is used to shift to the Graph screen.

2.17.1 Detail Temperature Management



(1) Graph Display

The temperature changes are displayed in graph form.

Horizontal axis: Time

Longitudinal axis: Temperature

(2) Graph Display Selection (Legend)

This is used to select the CH to be displayed.

The CH can be displayed in the graph by making a selection (Putting the tick mark).

(3) Change Graph Scale

This is used to change the graph range (Longitudinal Axis).

(4) Update Graph Button

Pressing this button will update the graph range (Longitudinal Axis).

(5) Print Button

This is used to print the graph displayed on the screen.

(6) List Button

This is used to shift to the list.

(7) Search Month Change Button

This is used to change the search month to the next month.

(8) Graph Scale Change Button

This is used to change the scale of the graphs.

2.18 Fuel Tank



(1) Time Search(From/To)

Search for Fuel Tank data of vehicles between the dates set in From and To boxes.

(2) Vehicle Search

This is used to set vehicle search criteria.

All Vehicles or Select Individual Vehicles can be set.

(3) Search Button

This is used to start the search.

(4) Cancel Button

This is used to abort the search.

(5) Graph Scale Change Button

This is used to change the scale of the graphs.

(6) Vehicle Path Button

This is used to display the Vehicle Path screen.

(7) The information of Fuel Tank

This is used to display the information of a Fuel Tank in which the cursor is placed, on a Fuel Tank graph.

- Date
- Time
- Residual quantity of the Fuel Tank1
- Residual quantity of the Fuel Tank2

(8) Graph of Fuel Tank1

This is used to display a graph of the Fuel Tank1.

(9) Graph of Fuel Tank2

This is used to display a graph of the Fuel Tank2.

(10) Graph of Vehicle Path

This is used to display status (Running, Idle, or Truck Stop) of the vehicle.

(11) Change date button

This button can change date that shown in the graph.

(12) Print Button

This is used to print the graph displayed on the screen.

3 Setting

3.1 Display Setting

The screenshot shows the 'Display' settings page in the Vehicle Cloud Service application. The page is organized into a grid of settings sections. On the left, sections 1 through 9 are listed vertically. On the right, sections 10 through 19 are listed vertically. The sections include:

- Language** (1): Radio buttons for Thai (selected) and English.
- Calendar Setting** (2): Radio buttons for Christian (selected) and Buddhist.
- Date Format** (3): Radio buttons for dd/mm/yyyy (selected) and yyyy/mm/dd.
- Automatic Logout Setting** (4): Radio buttons for Non (selected), 15 min, 30 min, and 1 hour.
- Speed Chart (Start Indication)** (5): Radio buttons for Midnight (selected) and Service Start Time.
- Speed Chart (Subgraph)** (6): Radio buttons for Distance Graph (selected), Throttle Opening Graph, Amount of fuel Graph, Temperature, Fuel Tank1, and Fuel Tank2.
- Daily Report Type** (7): A dropdown menu showing 'Sample' and a 'Speed Chart' button.
- Speed Histogram Vehicle Design** (8): Radio buttons for Truck (selected) and Bus.
- Map Setting** (9): Radio buttons for Dee-Map(Thai), Dee-Map(En) (selected), and Openstreet Map.
- Alarm Icon** (19): A dropdown menu showing 'Normal'.
- Monitor Home Screen** (10): Radio buttons for Service State, Tracking, and Delivery Plan.
- Detail Analysis Home Screen** (11): Radio buttons for Speed Chart, Radar Chart, Scatter Graph, Speed Histogram, RPM Histogram, Acceleration Histogram, and Throttle Opening Histogram.
- Emergency Information** (13): A list of emergency information items with checkboxes, including SOS Information, CH1-CH9, Temp.1-3, Fuel Tank1-2, Abrupt Deceleration, Start Without Service IN, (Law)Over Speed, (Law)Notice of Vehicle No Signal, (Law)Hours Exceeded, Idling, and Hazard.
- Actual Record Display Items** (12): A list of actual record display items with checkboxes, including Max Speed, Max Hours Exceeded, Over Speed Count, Over Speed Time, Over RPM Count, Over RPM Time, Sudden Acceleration Count, Abrupt Deceleration Count, Idling Time, Average Speed, and Max RPM.
- Tracking Display Items** (17): A list of tracking display items with checkboxes, including Vehicle Name, Status Name, Uptime, Sub District, Province, Station Name, Speed, District, Driver Name, and Driver Type.
- Vehicle Path Display Items** (18): A list of vehicle path display items with checkboxes, including Uptime, Speed, RPM(rpm), Status Name, Driver Name, Driver Type, Driver No., Station Name, ODO(Km), and Distance(km).

At the top right, there are buttons for 'End' (16), 'SAVE' (14), and 'CANCEL' (15).

(1) Language Selection

This is used to select either Thai (default) or English.

(2) Calendar Settings

This is used to select either the Christian era calendar or Buddhist era calendar.

(3) Date Format Setting

This is used to select either a dd/mm/yyyy or yyyy/mm/dd format.

(4) Auto Log Out Settings

This is used to configure the Auto Log Out settings.

You can select from any of the following options: Non, 15 minutes, 30 minutes, or 1 hour.

(5) Speed Chart - Start Time Setting

This is used to select either the midnight = 0:00 (default) or Service Start Time.

(6) Speed Chart - Subgraph Initial Setting

This is used to configure the settings by selecting either Distance Graph (default) or Throttle Opening Graph or Amount of Fuel Graph or Temperature Graph or Fuel Tank1 • 2 Graph.

(7) Daily Report Type

The report type to be displayed on the Daily Report screen can be set. The available report types are as shown below.

- Scatter Graph
- Speed Chart

Clicking the Sample button allows you to check the way the report will be shown.

(8) Vehicle Design Setting on the Speed Histogram

This is used to select either Truck (default) or Bus.

(9) Map Settings

You can select from any of the following options: Dee-Map (Thai), Dee-Map (En), or Openstreet Map.

(10) Monitor Home Screen Settings

This is used to select from any of the following options: Service State, Tracking(default), or Delivery Plan (Dispatch board and training plan control).

(11) Detailed Analysis Home Screen Control

This is used to select from any of the following options: Speed Chart (default), Radar Chart, Speed Histogram, Engine Speed histogram (RPM histogram), Acceleration and Deceleration Histogram, or Throttle Opening Histogram.

(12) Actual Performance Table - Display Item Selection

Up to 13 items can be selected.

The default values are the following 13 items.

- Transit Time
- Mileage (km)
- Over Speed Count
- Over Speed Time (hrs.)
- Max Speed
- Max RPM
- Abrupt Start Count
- Sudden Acceleration Count
- Abrupt Deacceleration Count
- Idling Time
- Max Hours Exceeded
- Total Eval Score
- Total Eval Rank

The following items can also be configured.

- Stop (Break) Time (over 30 min)
- Average Speed
- Over RPM Count
- Over RPM Time (hrs.)
- Safe Driving Eval Rank,
- ECO Driving Eval Rank
- Safe Driving Eval Score
- ECO Driving Eval Score
- EXT ch1 ON count
- EXT ch2 ON count
- EXT ch3 ON count,
- EXT ch3 ON count
- EXT ch4 ON count
- EXT ch5 ON count
- EXT ch6 ON count,
- EXT ch7 ON count
- EXT ch8 ON count
- EXT ch9 ON count.

(13) Emergency information - Display Item Selection

- SOS Information
- EXT ch1
- EXT ch2
- EXT ch3
- EXT ch4
- EXT ch5
- EXT ch6,
- EXT ch7
- EXT ch8
- EXT ch9
- Abrupt Deceleration
- Prediction about danger
- Temperature abnormal value Ch1
- Temperature abnormal value Ch2
- Temperature abnormal value Ch3
- Fuel Tank1
- Fuel Tank2
- Start without "Service-IN"
- Hours Exceeded
- Idling alarm
- Hazard
- (Law) Hours Exceeded
- (Law)Over speed
- (Law)No read license to drive
- (Law) Vehicle lost

(14) Save button

This is used to save the content changed.

(15) Cancel button

This is used to undo the changes.

(16) End button

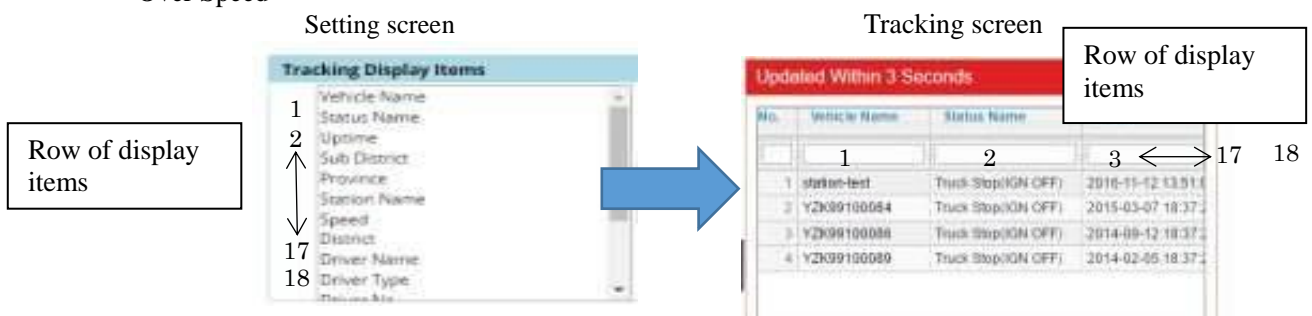
This is used to shift to the normal screen.

(17) Tracking Display items

This is used to change display items in the list in the tracking screen.

The following display items are displayed.

- Vehicle Name
- Status Name
- Uptime
- Station Name
- Speed
- Address(Sub Distinct, Distinct, Province)
- Driver Name
- Driver Type
- Driver No.
- RPM
- Temperature ch1,ch2,ch3
- GPS(Latitude, Longitude)
- Fuel Tank1,Tank2
- Over Speed

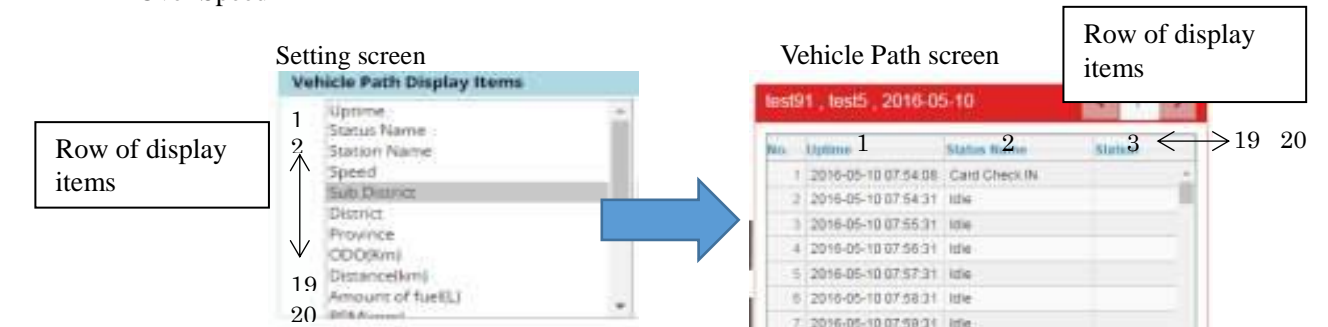


(18) Vehicle Path Display items

This is used to change display items in the list in the Vehicle Path screen.

The following display items are displayed.

- Time
- Event Name
- Station Name
- Speed(km/h)
- Sub District
- District
- Province
- ODO(km)
- Distance(km) (★)
- Amount of fuel(L) (★)
- RPM(rpm)
- Latitude, longitude
- Driver Name
- Driver Type
- Driver No.
- Temperature ch1,ch2,ch3
- Fuel Tank1,Tank2
- Over Speed



(19) Alarm Icon

For regulated vehicles (dangerous goods transport vehicles and trailer vehicles), the color of the icons on the map when over speed occurs can be changed.

– Normal

The icons are displayed in yellow only when over speed occurs.

The icons are displayed in red only when legal over speed occurs.

– Over Speed

All icons are displayed in yellow while over speed continues.

All icons are displayed in red while legal over speed continues.

3.2 Driving Management Setting

(1) Service-OUT time Setting

This is used to perform the Service-OUT time setting.

(2) Notice of Vehicle No Signal Setting

This is used to perform the notice of Vehicle No Signal setting.

(3) Save Button

This is used to save the content configured.

(4) Cancel button

This is used to cancel the content configured.

(5) Station Notification Setting

Set the following items of the Station function.

– Show Notification Pop-Up

Perform settings to display a pop-up in the screen when the vehicle arrives at a Station.

– Send e-mail

Perform settings whether an email is sent to the email address of the office or not when the vehicle arrives at the Station.

(6) Ch Name Setting

This is used to set the name for external CH and temperature.

(7) Setting of Calculating

Set a display method of monthly and daily evaluation scores.

– Normal

Average score of each operation is displayed.

– Divide by Distance

Divide mileage of each service proportionately based on monthly mileage and daily mileage, and perform weighting of the evaluation scores.

The weighted scores are displayed.

This display method places high importance on evaluation scores of long mileage.

Evaluation scores for short mileage are not reflected to monthly and daily scores.

<Functions covered>

*Ranking

*Vehicle Result

*Driver Result

(Display example)

1) Normal Settings

Data	Operation	Data Details				Daily scores		
		Distance (km)	Safety scores	Economic scores	Total scores	Safety scores	Economic scores	Total scores
1st September	Operation①	10	90	80	85	92.5	82.5	87.5
	Operation②	150	100	90	95			
	Operation③	50	80	70	75			
	Operation④	30	100	90	95			
2nd September	Operation①	20	90	80	85	70	60	65
	Operation②	300	50	40	45			
3rd September	Operation①	5	100	100	100	86.7	93.3	90
	Operation②	20	90	100	95			
	Operation③	140	70	80	75			
	Monthly average		85.6	81.1	83.3	83.1	78.6	80.8

These scores are displayed in the Average column in the Ranking screen, or in monthly scores in the Vehicle Result screen and the Driver Result screen.

These scores are displayed in the daily score column in the Ranking screen.

*Ranking Screen

Rank	Driver	Average	Grade	1	2	3
1	Mr.A	83.3	A	87.5	65	90

*Vehicle Result Screen

Vehicle Result						CSV	Print	
Vehicle Name	Service Count	Transit Time	Fuel Graph	Mileage(km)	Average Speed	Total eval score	Safe driving eval score	ECO driving eval score
DEMO	31	12:47:55		706.6	36.3	89.4	85.9	90.4
ES-922-010	3	02:18:53		55.0	28.0	99.4	100.0	66.6

*Driver Result Screen

Driver Result						CSV	Print
Driver Name	Service Count	Transit time	Mileage(km)	Average Speed	Total eval score	Safe driving eval score	ECO driving eval score
MR TESTGOOD	1	01:01:57	84.7	82.6	85.1	86.8	86.6
MR EGOOD	3	01:22:28	64.7	39.5	83.5	80.3	82.8
driver undefined	3	00:02:10	1.6	41.0	100.0	100.0	100.0

2) Divide by Distance Settings

Data	Operation	Data Details								Daily scores (Average)			
		Distance (km)	Distance (each day)	Ratio	Safety scores	Safety scores (Average)	Economic scores	Economic scores (Average)	Total scores	Total scores (Average)	Safety scores	Economic scores	Total scores
Sep.1th	Operation①	10	240	0.042	90.0	3.8	80.0	3.3	85.0	3.5	95.4	85.4	90.4
	Operation②	150		0.625	100.0	19.5	90.0	56.3	95.0	59.4			
	Operation③	50		0.208	80.0	16.7	70.0	14.6	75.0	15.6			
	Operation④	30		0.125	100.0	12.5	90.0	11.3	95.0	11.9			
Sep.2nd	Operation①	20	320	0.042	90.0	3.8	80.0	3.3	85.0	3.5	95.4	85.4	90.4
	Operation②	300											
Sep.3th	Operation①	5	165	0.030	100.0	3.0	100.0	0.7	100.0	0.7	78.3	83.0	78.2
	Operation②	20		0.121	90.0	10.9	100.0	12.1	95.0	11.5			
	Operation③	140		0.848	70.0	59.4	80.0	67.9	75.0	63.6			
		725									78.8	70.3	72.0

These scores are displayed in the daily score column in the Ranking screen.

*Ranking Screen

Rank	Driver	Average	Grade	1	2	3
1	Mr.A	68.7	C	90.4	47.5	78.2

$$10/725=0.014$$

$$90*0.014 \div 1.2$$

Data	Operation	Data Details							
		Distance (km)	Ratio	Safety scores	Safety scores (Average)	Economic scores	Economic scores (Average)	Total scores	Total scores (Average)
1st September	Operation①	10	0.014	90	1.2	80	1.1	85	1.2
	Operation②	150	0.207	100	20.7	90	18.6	95	19.7
	Operation③	50	0.069	80	5.5	70	4.8	75	5.2
	Operation④	30	0.041	100	4.1	90	3.7	95	3.9
2nd September	Operation①	20	0.028	90	2.5	80	2.2	85	2.3
	Operation②	300	0.414	50	20.7	40	16.6	45	18.6
3rd September	Operation①	5	0.007	100	0.7	100	0.7	100	0.7
	Operation②	20	0.028	90	2.5	100	2.8	95	2.6
	Operation③	140	0.193	70	13.5	80	15.4	75	14.5
		725			71.4		65.9		68.7

$$1.2+20.7+5.5+\dots+13.5 \div 71.4$$

These scores are displayed in the Average column in the Ranking screen, or in monthly scores in the Vehicle Result screen and the Driver Result screen.

*Vehicle Result Screen

Vehicle Result								
Vehicle Name	Service Count	Transit Time	Fuel Graph	Mileage(km)	Average Speed	Total eval score	Safe driving eval score	ECO driving eval score
DEMO	31	12:47:55		706.5	36.3	89.4	85.9	90.4
ES-922-010	3	02:18:53		55.0	28.0	99.4	100.0	66.6

*Driver Result Screen

Driver Result								
Driver Name	Service Count	Transit time	Mileage(km)	Average Speed	Total eval score	Safe driving eval score	ECO driving eval score	
MR.TESTGOOD	1	01:01:57	84.7	82.6	85.1	86.8	86.6	
MR.EGOOD	3	01:22:28	54.7	39.5	83.5	80.3	82.0	
driver undefined	3	00:02:10	1.6	41.0	100.0	100.0	100.0	

(8) Setting of Combine service

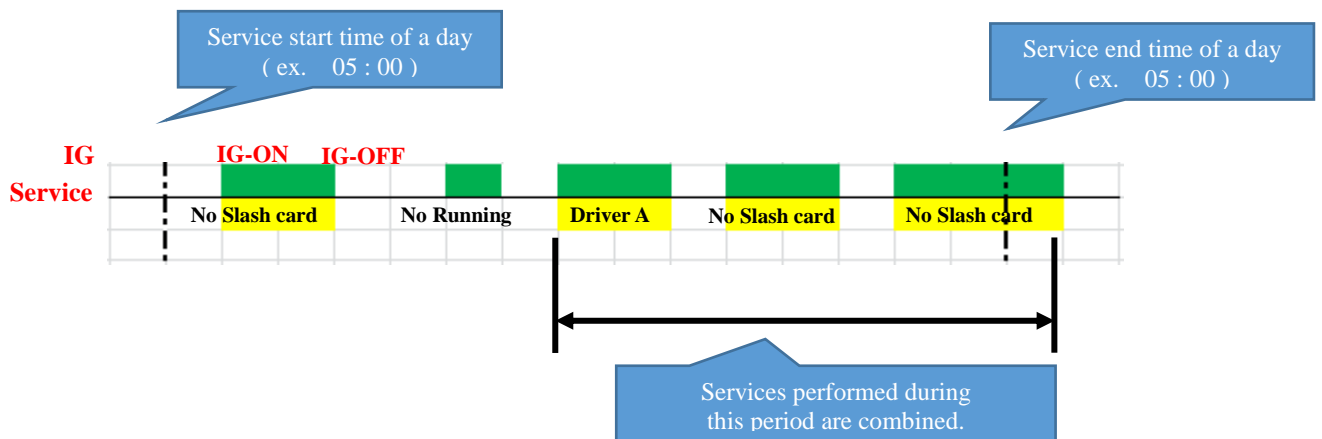
When service is performed in a license card using mode and the driver forgets to slash the card, service is divided .

This setting is used to automatically combine divided services.

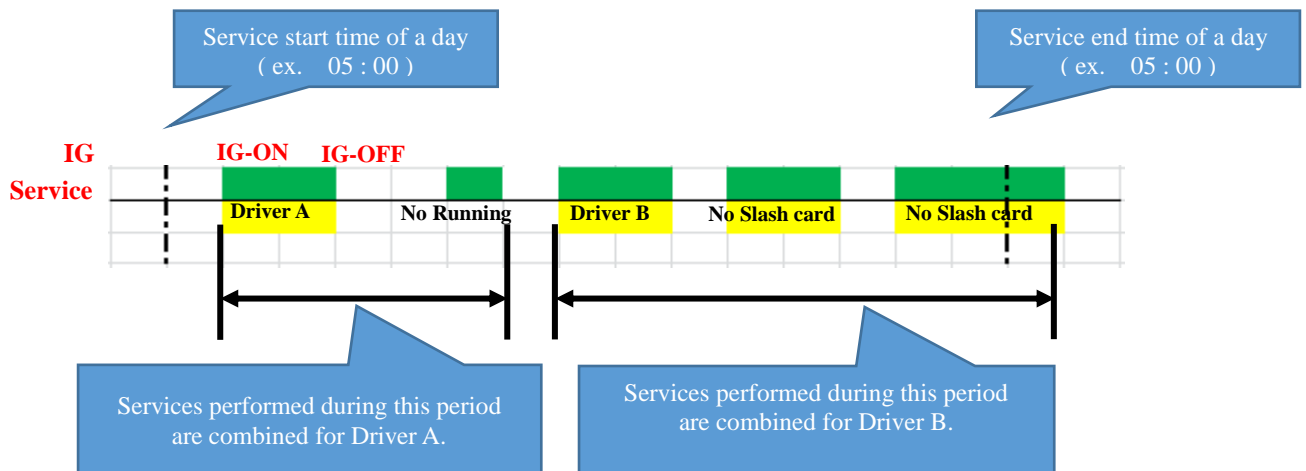
When this setting is activated, service which is created after the driver slashes the card and does not have driver information is combined.

The services performed between the Start time and the End time of the day can be combined.

Example 1)



Example 2)



3.3 Master Setting

Vehicle Cloud Service

Display ~ Driving Management ~ Master ~

End

Search Cancel

Company Name : (1)

Office	Vehicle Type	Vehicle	Driver	Login ID	Station Type	Station
No.	Office Name	Officer Name	Phone Number			
1	Team1	MATSUYAMA	000998776			
2	Main office	YAMA	000-627-3819			
3	111111	111111	111111111111			
4	2222	222222	111111111111			
5	a store	99	453267890			

+Add New Office Edit Office

(1) Master setting

This is used to perform the new settings and modifications of Company, Vehicle type, Vehicle, Driver, Login ID, Station Type and Station.

3.3.1 Office Setting

(17)

Vehicle Cloud Service

Display - Driving Management - Master - End bbbb

Search Cancel

Company Name : M&M

(14) +Add New Office (15) Edit Office

No.	Office Name	Officer Name	Phone Number	E-mail1	E-mail2	Address
1	M&M HEAD	MM-san1	45-290-345	miyahiko1015@gmail	110@yahoo	นางนา นางนา กรุงเทพมหานคร
2	M&M Osaka Branch	Y-san	7777777888			สำนักงาน กรุงเทพมหานคร
3	M&M Tokyo office	Z-san	03-444-445	miyahiko1015@gmail		สำนักงาน กรุงเทพมหานคร
4	Sankok office	B-san	777777777	k.lshikawa.0905s@g		สำนักงาน กรุงเทพมหานคร
5	YI	IY	111111111	110@yahoo	110@gmail	สำนักงาน กรุงเทพมหานคร
6	ee	ee	1223456788	ttteewvvw		สำนักงาน กรุงเทพมหานคร
7	thailand brunch	nyo	345678900	h		สำนักงาน กรุงเทพมหานคร
8	brunch2	ggg	123456789	j		สำนักงาน กรุงเทพมหานคร
9	sub office	yytt	5677777777	45		สำนักงาน กรุงเทพมหานคร
10	ts	ts	123456789	123		สำนักงาน กรุงเทพมหานคร

(1) (2) (3) (4) (5) (1)

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Billing Contact Name	Billing Address	SOS	Lawful	Hazard	Temp Ch	Fuel Sensor

(7) (8) (9) (10) (11) (12) (13)

(1) Office Name

This is used to display the offices names.

(2) Officer Name

This is used to display the officer names.

(3) Office Phone Number

This is used to display the office phone numbers.

(4) Office E-mail1

This is used to display the E-mail addresses1 of office contacts.

(5) Office E-mail2

This is used to display the E-mail addresses2 of office contacts.

(6) Office Address

This is used to display the offices' addresses.

(7) Billing Contact Name

This is used to display the Billing Contact name.

(8) Billing Address

This is used to display the Billing Address.

(9) SOS

This is used to display the email address where the message is sent when the SOS Alarm occurs.

(10) Lawful

This is used to display the email address where the message is sent when the Lawful (Over Speed, Continuous Driving or No Read License Card) Alarm occurs.

(11) Hazard

This is used to display the email address where the message is sent when the Hazard Alarm occurs.

(12) TempCh

This is used to display the email address where the message is sent when the Temperature Alarm occurs.

(13) Fuel Tank

This is used to display the email address where the message is sent when the Fuel Tank Alarm occurs.

(14) Add new Office

This is used to add a new office.

The screenshot shows a web form titled "Edit Office" with a red header bar. At the top right are "Save" and "Cancel" buttons. The form is divided into two main sections, each with a red box around its input fields:

- (15) Office Setting:** Contains text input fields for "Office Name", "Officer Name", "Phone Number", "E-mail1", "E-mail2", "Address" (with an "Add" button), "Billing Contact Name", and "Billing Address".
- (16) Email Setting:** Contains dropdown menus for "SOS email", "Lawful", "Hazard", "Temp CH", and "Fuel Sensor", each with a "Please Select" label and a downward arrow.

(15) Office Setting

The following items can be set.

- Office Name
- Office Name
- Phone Number
- E-mail1
- E-mail2
- Address
- Billing Contact Name
- Billing Address

(16) Email Setting

This is used to set the email addresses where the message is sent when an alarm occurs.

Two email addresses can be set.

- E-mail1
- E-mail2

(17) Edit Office

This is used to edit an office you select.

Refer to (15) above for the items to be set.

3.3.2 Vehicle Type Setting

Vehicle Cloud Service

Display ~ Driving Management ~ Master ~ End

Search Cancel

Company Name : 1

Office	Vehicle Type	Vehicle	Driver	Login ID	Station Type	Station
	No.					
	1					
	2					

+Add New Vehicle Type Edit Vehicle Type Delete Vehicle Type

Vehicle Type Name (1)

2 Wheels1

10*9tire

(1) Vehicle Type Name

This is used to display and enter the vehicle type names.

3.3.3 Vehicle Setting

Vehicle Cloud Service

Display - Driving Management - Master - End

Company Name :

Office Vehicle Type Vehicle Driver Start

Eval Setting Vehicle Device Setting Edit Vehicle

Vehicle Number (6)	Vehicle Name (7)	Office Name (8)	Vehicle Type Name (9)	Default Driver (10)	Vehicle Device Setting (11)	Eval Setting (12)	(13)	(14)	(15)	(16)
103103	serial103	111111	2 Wheels 1	MrA	20150427_2	YY				
65432100	65432100	Main office	2 Wheels 1	MR. TESTG...	20150427_2	YY		12345	67890	12345
2342	thong3	111111	2 Wheels 1	MR. TESTG...	20150427_2	YY				
97999997	97999997	Team1	2 Wheels 1	MR. TESTG...	20150427_2	test-06				
02	ti	Main office	2 Wheels 1	MR. TESTG...	20150427_2	YZK-T				
09091212	09091212	Main office	2 Wheels 1	MR. TESTG...	20150427_2	YY				
77677667	77677667	Main office	2 Wheels 1	MR. TESTG...	20150427_2	matest				
44411444	44411444	Main office	2 Wheels 1	MR. TESTG...	20150427_2	YY				
11222211	11222211	Main office	2 Wheels 1	MR. TESTG...	20150427_2	YAZAKIE				
30000001	30000001	Main office	2 Wheels 1	MR. TESTG...	20150427_2	YAZAKIE				
33331111	33331111	Main office	2 Wheels 1	MR. TESTG...	lasttest_200	YY				
88888881	test test	Main office	2 Wheels 1	MR. TESTG...	6555_20000	YY				
99900009	99900009	Team1	2 Wheels 1	MR. TESTG...	20150427_2	YZK-T				
92200001	ES-922-0001	Team1	2 Wheels 1	ES Driver 2	master_dev1	YAZAKIE				
57575712	57575712	Team1	2 Wheels 1	MR. TESTG...	master_dev1	YY				
44444	yazaki	Team1	2 Wheels 1	MrA	testsetting1	YZK-T				
00000000	00000000	Team1	2 Wheels 1	MR. TESTG...	20140422_2	YZK-T	2015-09-21 00:00:00	6464	ms678	Cher Hat

Search Cancel

(1) Office Look-up Button

This is used to select the search criteria for the offices.

(2) User Vehicle Type Look-up Button

This is used to select the search criteria for the user vehicle type.

(3) Company Look-up Button

This is used to select the search criteria for manufacturers.

(4) Search Button

This is used to start a search.

(5) Cancel Button

This is used to abort the manufacturer search.

(6) Vehicle Number

Vehicle number. Vehicle number cannot be entered because it is the code on the database.

(7) Vehicle Name

The vehicle names can be displayed and entered.

(8) Office Name

The offices names can be displayed and entered.

(9) Vehicle Type Name

This is used to display and enter the vehicle type names.

(10) Default Driver

The default drivers can be displayed and entered.

(11) Vehicle Device Setting

The vehicle names can be displayed and entered (by using the In-Vehicle Device Setting Button).

(12) Evaluation Value Setting

The evaluation values can be displayed and entered (by using the Evaluation Value Setting Button).

(13) Delivery Date

The Delivery date can be displayed.

(14) Chassis Number

The Chassis Number can be displayed.

(15) License Number

The License Number can be only displayed.

(16) Province

The Province can be only displayed

(17) Evaluation Setting Button

This is used to shift to the Evaluation Setting screen.

(18) In-Vehicle Device Setting Button

This is used to shift to the In-Vehicle Device Setting button.

(19) Edit Button

After selecting the vehicle that you want to edit, pressing this button will generate the line selected for editing at the top.

3.3.3.1 Evaluation Setting

(1) Setting List

The evaluation settings are listed.

The contents of the eval setting by selecting the setting is shown.

(2) Evaluation item

Select the target of evaluation from among the 14 items on the screen (item name).

(3) Add evaluation criteria item and change idling evaluation item

*Up to 3 external input Chs can be added to evaluation items.

For external input Chs to be set, refer to the settings of the onboard device.

*Idling evaluation criteria can be selected.

- ✓ Transit Time
- ✓ Driving Time

(4) Evaluation item setting

Selected setting of the item is displayed.

(4)-1. Sets the company target rank for the selected evaluation item.

(4)-2. Set the setting range and Score and rank of evaluation.

(4)-3. Sets the comment for each rank.

(5) Evaluation setting

The setting for the all evaluation and economic evaluation and safety assessment.

(5)-1.Set the evaluation range and rank.

(5)-2.Sets the comment for each rank.

(6) New Criterion Button

When pressing this button, add a new evaluation setting.

(7) Save button

This is used to save the content changed.

(8) Cancel button

This is used to undo the changes.

<How to set evaluation criteria>

Set evaluation targets by clicking items selected out of 14 items on the screen (item name).

Evaluation target items are also displayed in Safety Drive and ECO Drive of the radar chart (RaderChart of Daily Report and Detail Analysis).

In addition, criteria rank, evaluation value scope, and evaluation score can be set for each evaluation item.

By clicking items, select evaluation target ("✓") or deselect evaluation target ("×").

Company rank and highest score for each item are displayed. Weights of evaluation target items are automatically calculated and displayed.

Evaluation Item	Unit	Safe	ECO	Target	Score	Weight
Maximum speed	km/h	✓	×	C	20	6.0
Over Speed Count	times/h	✓	✓	C	20	6.0
Over Speed Time	%	✓	✓	C	20	6.0
Over RPM Count	times/h	×	✓	C	40	12.1
Over RPM Time	%	×	✓	C	40	12.1
Abrupt Start Count	times/h	✓	✓	C	10	3.0
Sudden Acceleration Count	times/h	✓	✓	C	10	3.0
Abrupt Deceleration Count	times/h	✓	×	C	40	12.1
Idling Time	%	×	✓	C	20	6.0
Hours Exceeded	mm	✓	×	C	5	1.5
Prediction about Danger	times/h	✓	×	C	40	12.1
selection-1	times/h	✓	✓	C	20	6.0
selection-2	times/h	✓	✓	C	20	6.0
selection-3	times/h	✓	✓	C	20	6.0

Click an evaluation item to shift to the display of the item.

Evaluation item setting
Maximum speed

Target	Range	-		Score	Rank
<input type="radio"/>	80	-		0	E
<input type="radio"/>	70	-	79	2	D
<input type="radio"/>	60	-	69	5	C
<input type="radio"/>	50	-	59	20	A
<input type="radio"/>	0	-	49	20	A

Set an evaluation scope.
The scope can be set "from" - "to," and it cannot be duplicated.

Set a distribution of scores.
Ranks are automatically set from "A" to "E" (with "A" as the highest rank) based on the distribution of scores.
*Do not set "0" for ranks other than rank "E".

<Comprehensive evaluation setting>

Set the setting for Safety Drive Score, ECO Drive Score, or Total Score.

Set a scope of a distribution of scores using evaluation scores.
The scope can be set "from" - "to," and it cannot be duplicated.

Evaluation setting				
Safe		ECO		Total
Range		-		Rank
80		-	100	A
70		-	79.9	B
60		-	69.9	C
40		-	59.9	D
0		-	39.9	E

Click this tab to switch.

<Contents of evaluation items>

Item name	Unit	Contents
MAX Speed	km/h	
Over Speed Count	times/h	A / B A = Over Speed Count B = Transit Time
Over Speed Time	%	A / B × 1 0 0 A = Over Speed Time B = Transit Time
Over RPM Count	times/h	A / B A = Over RPM Count B = Transit Time
Over RPM Time	%	A / B × 1 0 0 A = Over RPM Time B = Transit Time
Abrupt Start Count	times/h	A / B A = Abrupt Start Count (For initial velocity below 10km) B = Transit Time
Sudden Acceleration Count	times/h	A / B A = Sudden Acceleration Count (For initial velocity above 10km) B = Transit Time
Abrupt Deceleration Count	times/h	A / B A = Abrupt Deceleration Count B = Transit Time

Item name	Unit	Contents
Idling Time	%	$A \div B \times 100$ A = Idling Time B = Transit Time or Driving Time (Setting)
Hours Exceeded	mm	Maximum Continuous Driving Time
Prediction about Danger	times/ h	$A \div B$ A = Prediction about Danger Count B = Transit Time
Select Item1	times/ h	$A \div B$ Frequency of the Selected Item B = Transit Time
Select Item2	times/ h	$A \div B$ Frequency of the Selected Item B = Transit Time
Select Item3	times/ h	$A \div B$ Frequency of the Selected Item B = Transit Time

*Items related to the engine speed (time/number of speed over) are only for vehicle data from which engine speed data can be obtained.

<Evaluation method>

Safety Drive Score, ECO Drive Score, and Total Score are calculated by the following calculation formula.

※Evaluation targets and scores are for reference only, and different from actual ones.

Item Name	Evaluation Target	
	Safety Drive	ECO Drive
MAX Speed	○	—
Over Speed Count	○	○
Over Speed Time	○	○
Over RPM Count	—	○
Over RPM Time	—	○
Abrupt Start Count	○	○
Sudden Acceleration Count	○	○

< Safe Driver Score >	Score	Max Score	Rank
MAX Speed	20	20	A
Over Speed Count	20	30	B
Over Speed Time	20	30	B
Abrupt Start Count	10	40	D
Sudden Acceleration Count	10	40	E

Total Score	80	160
Safe Driver Score, Rank	$(80 \div 160) \times 100 = 50$ C	

< ECO Drive Score >	Score	Max Score	Rank
Over Speed Count	20	30	B
Over Speed Time	20	30	B
Over RPM Count	20	30	C
Over RPM Time	10	30	C
Abrupt Start Count	10	40	D
Sudden Acceleration Count	10	40	E

Total	90	200
ECO Drive Score, Rank	$(90 \div 200) \times 100 = 45$ C	

< Total Score >	Score	Max Score	Rank
MAX Speed	20	20	A
Over Speed Count	20	30	B
Over Speed Time	20	30	B
Over RPM Count	20	30	C
Over RPM Time	10	30	C
Abrupt Start Count	10	40	D
Sudden Acceleration Count	10	40	E

Total	110	220
<u>Total Score, Rank</u>	<u>$(110 \div 220) \times 100 = 50$ C</u>	

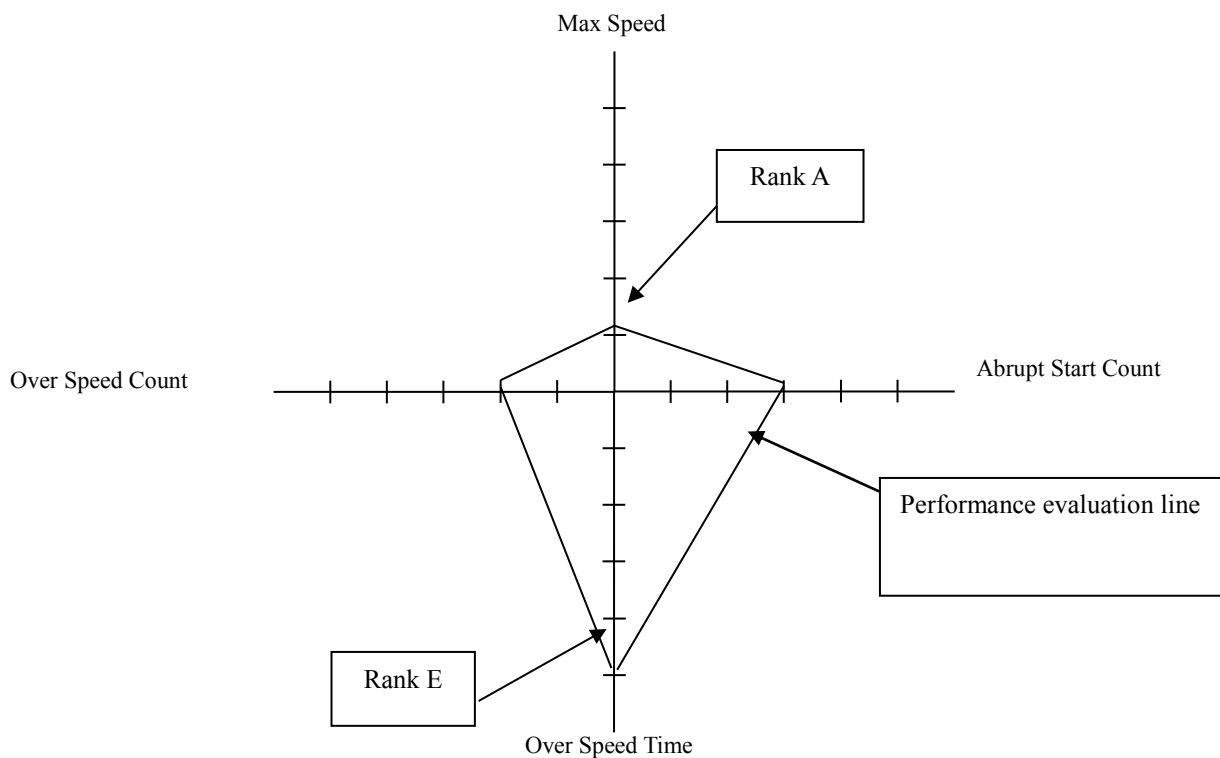
<Relationship between evaluations and radar chart displays>

Operation data evaluated based on the evaluation setting value is reflected to the radar chart (safety drive daily report or operation analysis report) as follows.

Each branch of the radar chart represents an evaluation item, and each item is evaluated on a scale of 1 to 5

(The closer to the center the rank is displayed, the higher it is. The closest to the center is the rank "A" and the least close to the center is the rank "E".)

Display example Safety Drive Rank

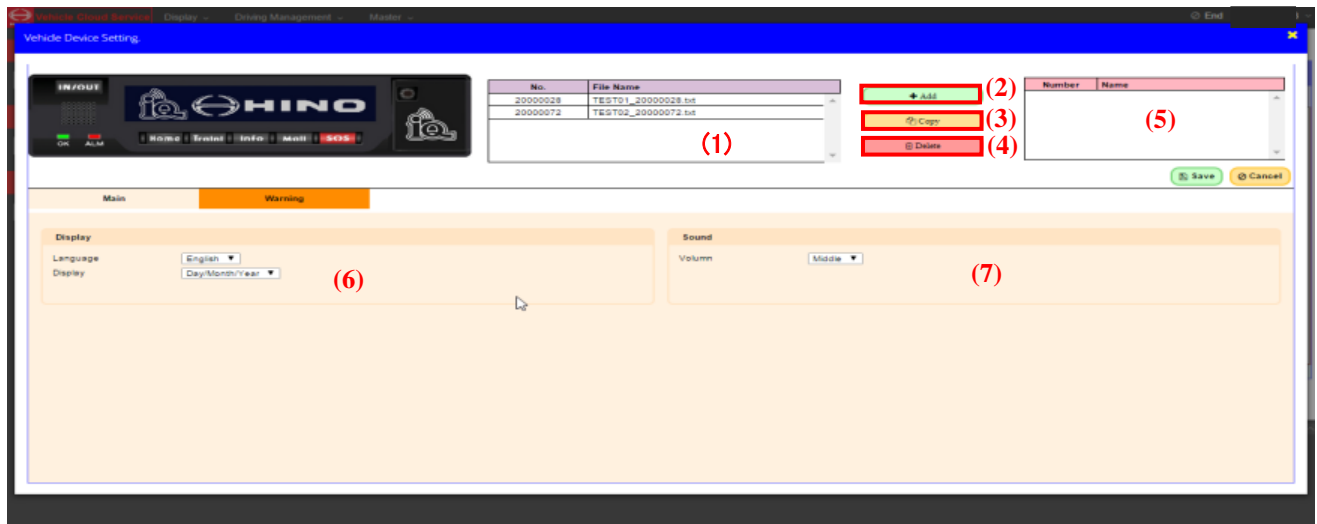


※Items set as evaluation targets for which measured values (engine speed) cannot be obtained due to the setting of the onboard device are not evaluated.

However, actual lines are displayed at the rank "E" in the chart display of the safety daily report/radar chart.

3.3.3.2 In-Vehicle Device Setting

3.3.3.2.1 Main Setting



(1) Setting File List

The setting files are listed.

(2) Add Setting Button

This is used to add a new setting.

(3) Copy Button

This is used to copy a setting.

(4) Delete Button

This is used to delete a setting.

(5) Target Vehicle List

The vehicles that have been set as a target vehicle are listed.

(6) Language Setting

This is used to set the language.

- Language setting
- Display setting (year/month/day or day/month/year)

(7) Sound Setting

This is used to perform the sound setting on the in-vehicle device.

Volume setting (Off, Low, Middle, Loud)

3.3.3.2.2 Alarm Setting

Vehicle Device Setting

Main | Warning

Over Speed Alarm (1)

Alarm: Sound | Advance Alarm: Buzzer

Threshold: 80 km/h | Duration: 5 sec | Send Alarm: ☒

Threshold: 50 km/h | Duration: 0 sec

Over RPM Alarm (2)

Alarm: Buzzer | Advance Alarm: Buzzer

Threshold: 1600 rpm | Low-Speed: 2000 rpm | High-Speed: 1600 rpm

Duration: 100 sec | Threshold: 1400 rpm | Duration: 0 sec

Constant Speed to Check: 50 km/h

Hours Exceeded Alarm (7)

Alarm: Sound

Hours Exceeded Time: 4 h | 0 min

Determined Stop Time: 100 sec

Accumulate Break Time: 0 h | 30 min

Send Alarm: ☒ | Advance Alarm: Buzzer

Hours Exceeded Time: 3 h | 0 min

Idling Alarm (3)

Alarm: Sound

Time Check Idle: 5 min | Idle Cut of Speed: 10 km/h

Alarm Interval: 10 min | Send Alarm: ☒

No Service In Departure (8)

Alarm For No Service In Departure: Sound

Hazard (9)

Hazard Alarm: No Sound

Send Alarm: ☒

No.	File Name
20000048	20190519_20000048.txt
20000026	MH1_20000026.txt
20000020	QmH20170127_20000020.txt
20000020	_20000020.txt
20000096	kubocCH_20000096.txt

+ Add | Copy | Delete

Number | Name

191191	DTC-test
201520	File
01	Station test_M&M
88888888	44412345123456789123
0458	File
200024	200024
855555	Phone

Save | Cancel

(1) OVER SPEED Setting

This is used to set the overspeed alarm and overspeed warning alarm.

The overspeed warning alarm will be given out only as an audio notification, and the event will not be transmitted.

– Sound

Perform the sound setting. (Sound, Buzzer, No sound, Not use)

– Threshold [km/h]

Set an over speed limit.

– Duration [sec]

Set a time duration to issue an alarm after the over speed limit is reached.

– Output Signal

Set whether to send external output signals to other devices or not.

– Send Alarm

Set whether to send event or not.

(2) OVER RPM Setting

This is used to set the over engine revolution alarm and over engine revolution warning alarm.

The engine over revolution warning alarm will be given out only as an audio notification, and the event will not be transmitted.

- Sound
Perform the sound setting. (Sound, Buzzer, No sound, Not use)
- Threshold (Low-speed, high-speed) [rpm]
Set an engine speed over limit. Switching between the low speed region and the high speed region is set using "Constant Speed Check."
- Duration [sec]
Set a time duration to issue an alarm after the engine speed over limit is reached.
- Constant Speed Check [km/h]
Set speed of switching between the low speed region and the high speed region.
The set value is included in the low speed region.
- Output Signal
Set whether to send external output signals to other devices or not.
- Send Alarm
Set whether to send event or not.
- Canceler of Alarm of Over RPM
Set not to issue an alarm when the external input signal set is ON.
Example: Engine speed over alarm is not issued when the PTO signal is ON.

(3) Idling Alarm Setting

This is used to perform the idling alarm setting.

- Sound
Perform the sound setting. (Sound, Buzzer, No sound, Not use)
- Time Check Idle [min]
Set an idling alarm time.
- Alarm Interval [min]
Set a time to reissue an alarm after the first idling alarm is issued.
- Idle Cut of Speed
Set a speed to decide as idling.
(This is used with the setting when the speed is measured by GPS)
- Send Alarm
Set whether to send event or not.
- Idling Cancel Setting
Set not to issue an alarm when the external input signal set is ON.
Example: When transporting frozen foods, the engine of the vehicle is kept ON while it is stopping in order to activate the freezer.
In this case, an idling alarm is not issued.

(4) Sudden Start Setting

This is used to perform the Sudden Start setting.

- Sound
Perform the sound setting. (Sound, Buzzer, No sound, Not use)
- Send Alarm
Set whether to send event or not.
- Threshold [km/h/s]
Set an acceleration limit for sudden start.
- Output Signal
Set whether to send external output signals to other devices or not.

(5) Sudden Acceleration Setting

This is used to perform the Sudden Acceleration setting.

- Sound
Perform the sound setting. (Sound, Buzzer, No sound, Not use)
- Send Alarm
Set whether to send event or not.
- Threshold [km/h/s]
Set an acceleration limit for sudden acceleration.
- Output Signal
Set whether to send external output signals to other devices or not.

(6) Abrupt Deceleration Setting

This is used to perform the Abrupt Deceleration setting.

- Sound
Perform the sound setting. (Sound, Buzzer, No sound, Not use)
- Send Alarm
Set whether to send event or not.
- Threshold [km/h/s]
Set an acceleration limit for abrupt deceleration.
- Output Signal
Set whether to send external output signals to other devices or not.

(7) Hours Exceeded Setting

This is used to set the continuous driving alarm and continuous driving warning alarm.

The continuous driving warning alarm will be given out only as an audio notification, and the event will not be transmitted.

* Issue an alarm when the stop time of the vehicle is below the Determined Stop Time and the driving time is the Hours Exceeded Time or above.

* The stop time of the vehicle is added when the stop time is the Accumulate Break Time or above.

The stop time below the Accumulate Break Time is added to the driving time.

- Sound
Perform the sound setting. (Sound, Buzzer, No sound, Not use)
- Hours Exceeded Time [h:mm]
Set a time of the continuous driving time alarm.
- Determined Stop Time [sec]
Set a stop time to cancel alarm to reset measured time of the alarm.
- Accumulate Break Time [h:mm]
Set a time to decide stop.
When the vehicle stops more than this time, the stop time is added to the Determined Stop Time.
- Send Alarm
Set whether to send event or not.

(8) No Service IN Departure Setting

This is used to perform the No Service IN Departure setting.

- Sound
Perform the sound setting. (Sound, Buzzer, No sound, Not use)

.

(9) Hazard

This is used to perform the Hazard setting.

- Sound
Perform the sound setting. (Sound, Buzzer, No sound, Not use)
- Send Alarm
Set whether to send event or not.

3.3.4 Driver Setting

The screenshot shows the 'Driver Setting' interface in the 'Vehicle Cloud Service' application. The sidebar on the left contains a 'Select Office' dropdown (1) and a 'Select License Type' dropdown (2), both with 'Search' (3) and 'Cancel' (4) buttons. The main area displays a table of drivers with columns for Driver Number (5), Driver Name (6), Office Name (7), License Number (8), and License Issue (9). Above the table are buttons for '+Add New Driver' (14), '+Edit Driver' (15), and '+Delete Driver' (16). Below the main table is a detailed view of license information with columns for License Issuing Area Number (9), License Type (10), License Term of Validity (11), Driver Telephone Number (12), and Driver E-mail (13).

Driver Number	Driver Name	Office Name	License Number	License Issue
1234567	MR. TESTGOOD	Main office	1234567	12
1234567809999	MR. TESTGOOD	Main office	1234567809999	12
1234567829999	MR. TESTGOOD	Main office	1234567829999	12
1234567890098	MR. TOIUU	Main office	1234567890098	12
1234567890331	MR. TESTGOOD	Main office	1234567890331	12

License Issuing Area Number	License Type	License Term of Validity	Driver Telephone Number	Driver E-mail
100	1	2020-05-01	---	---
100	1	2020-05-01	---	---
100	1	2020-05-01	---	---
100	1	2020-05-01	---	---
100	1	2020-05-01	---	---
100	1	2020-05-01	---	---
100	1	2020-05-01	---	---

(1) Office Name

The offices names can be displayed and entered.

(2) License Type

The license type can be displayed and entered.

(3) Search Button

This is used to start a search.

(4) Cancel Button

This is used to abort the manufacturer search.

(5) Driver Number

Driver numbers are listed. A driver code cannot be entered because it is the code on the database.

(6) Driver Name

This is used to display and enter the driver names.

(7) Office Name

The offices names can be displayed and entered.

(8) License Number

The driver license numbers can be displayed and entered.

(9) License Issuing Area Number

The license issue area numbers can be displayed and entered.

(10) License Type

The license types can be displayed and entered.

(11) License Expiration Date

The license expiration date can be displayed and entered.

(12) Driver's phone number

The drivers' phone numbers can be displayed and entered.

(13) Driver's E-mail

The drivers' E-mails can be displayed and entered.

(14) Add Driver Button

This is used to add a driver.

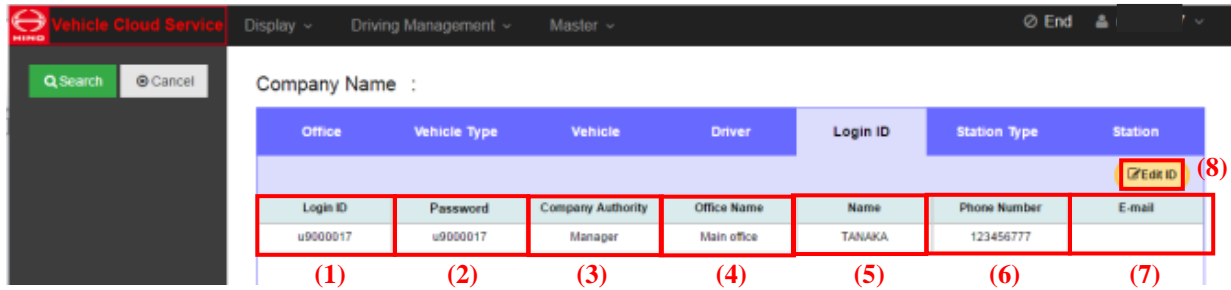
(15) Edit Driver Button

This is used to edit driver information.

(16) Delete Driver Button

This is used to delete a driver.

3.3.5 Login ID Setting



Office	Vehicle Type	Vehicle	Driver	Login ID	Station Type	Station
Login ID	Password	Company Authority	Office Name	Name	Phone Number	E-mail
u9000017	u9000017	Manager	Main office	TANAKA	123456777	

(1) (2) (3) (4) (5) (6) (7) (8)

(1) Login ID

The Login IDs can be displayed and entered.

(2) Password

The passwords can be displayed and entered.

(3) Company Permission

The companies permissions can be displayed and entered (or selected).

(4) Office Name

The offices names can be displayed and entered (or selected).

(5) Name

The ID registrants' names can be displayed and entered.

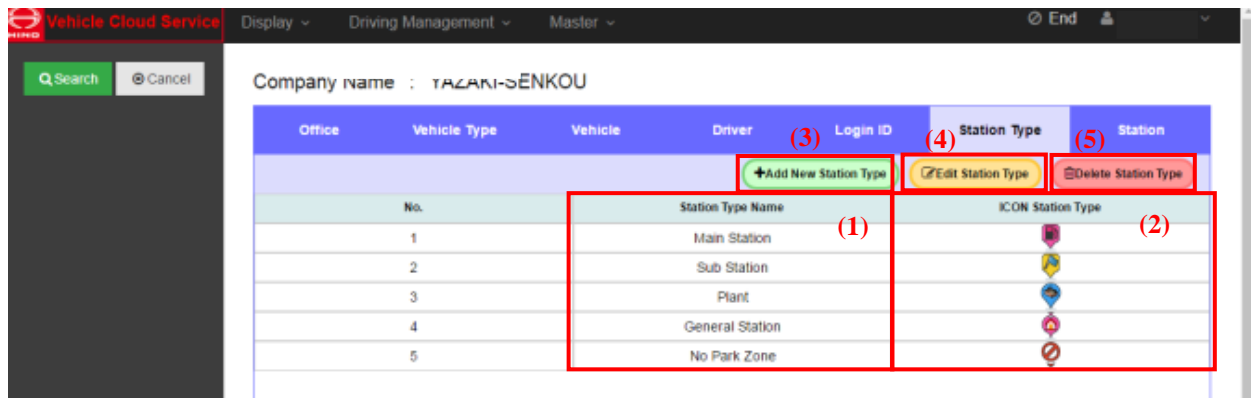
(6) Phone Number

The ID registrants' phone numbers can be displayed and entered.

(7) E-mail

The ID registrants' E-mails can be displayed and entered.

3.3.6 Station Type Setting



- (1) Station Type Name
Displays Station Type Name.
- (2) Station Type ICON
Displays Station Type ICON..
- (3) Add Station Type Button
This is used to add a Station Type..
- (4) Edit Station Type Button
This is used to edit Station Type information.
- (5) Delete Station Type Button
This is used to delete a Station Type.

3.3.7 Station Setting

Company Name : _____

No.	Station Name (1)	Station Type Name (2)	Format Type (3)	Area (4)
1	test2	7-1111	C	80
2	test1	7-1111	C	100
3	TEST2	gold	C	50
4	Circle 2	12345678901234567890	C	100
5	Polygon report path	12345678901234567890	P	null
6	test report path2	12345678901234567890	C	499

Station Address (5)	Telephone Number (6)	E-mail (7)	Postal Code (8)	Remark (9)
บางนาจัด เมืองสมุทรสาคร				
คลองกระต๊อ เมืองสมุทรสาคร				
บางนา บางนา กรุงเทพมหานคร				
คลองกระต๊อ คลองกระต๊อ กรุงเทพมหานคร				
คลองกระต๊อ คลองกระต๊อ กรุงเทพมหานคร	33	33	33	33
คลองกระต๊อ คลองกระต๊อ กรุงเทพมหานคร	11112	11112	11112	11112

- (1) Station Name (Distribution Point)
Displays Station Name (Distribution Point).
- (2) Station Type Name
Displays Station Type Name.
- (3) Format Type
Displays Format Type of the Station.
C : Circle
P : Polygon
- (4) Area
Displays a radius of the Station when its Format Type is a circle.
- (5) Station Address
Displays an address of the Station.
- (6) Telephone Number
Displays a phone number of the Station.
- (7) E-mail
Displays an email address of the Station.
- (8) Postal Code
Displays a postal code of the Station.
- (9) Remark
Displays supplementary information of the Station.
- (10) Add Station Button
This is used to add a Station.
- (11) Edit Station Button
This is used to edit Station information.
- (12) Delete Station Button
This is used to delete Station information.

4 Trip Delimiter Setting

The onboard device has five operation modes, and the way of Service-In and Service-Out varies in each mode. Regulated vehicles must be in either No3 or No5 mode.

*If you would like to change operation mode, consult with your dealer or call center.

<How to perform Service-In and Service-Out>

No	Operation mode	Service-In	Service-Out	Remarks
1	Non operation mode without using button	IGN ON	IGN OFF	
2	Operation mode with using button	IN/OUT Button	IN/OUT Button	
3	Licence recognition mode, without using button	Driver's licence card	IGN OFF	Slashing a driver's license is required every time IGN ON is enabled.
			Driver's licence card*1	
4	Licence recognition mode, with using button	Driver's licence card	IN/OUT Button	
			Driver's licence card*1	
5	Integrate by IN/OUT Button	IN/OUT Button	IN/OUT Button	Slashing a driver's license is required every time IGN ON is enabled.

*1 If you slash a driver's license which is the same as the one slashed when Service-In was performed, recording will be finished.

If you slash a driver's license which is different from the one slashed when Service-In was performed, recording will be finished and recording of the driver's license slashed last will be started.

4.1 Non operation mode without using button

<Definition of service>

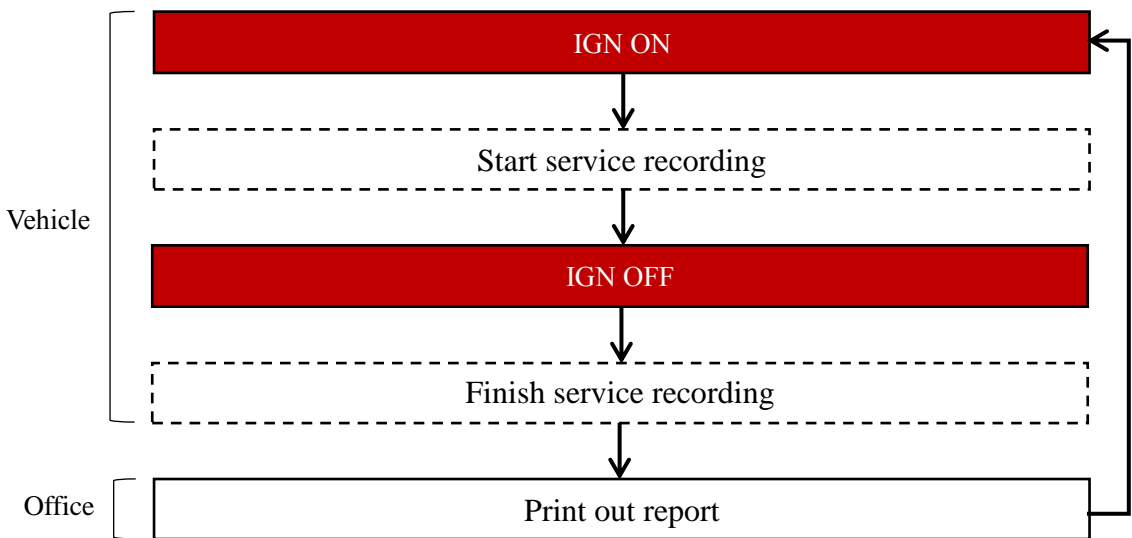
Drivers do not have to perform any operation. The first IGN ON is considered as service start, and the last IGN OFF is considered as service end based on the time set for each user.

If IGN ON is enabled for the second time or more in the same day, the previous service will be recorded continuously.

If a service continues over the point of the day (point of the time set by a user) when IGN ON is enabled, the service continues until IGN OFF is enabled. The service will be finished when IGN OFF is enabled.

<Purpose>

As drivers do not have to perform any operation, vehicle management can be performed easily.



4.2 Operation mode with using button

<Definition of service>

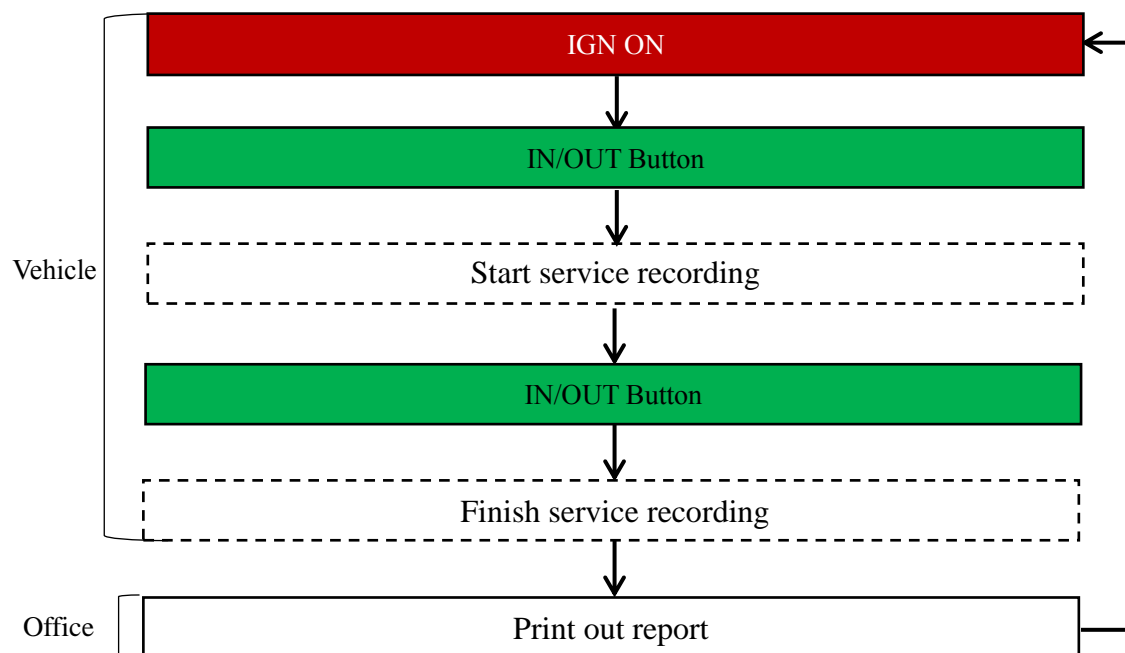
[IN] button is a trigger to start service.

[OUT] button is a trigger to end service.

If a service continues over the point of the day, it will be continued until Service-Out is performed.

<Purpose>

Although drivers have to perform operations, this is used to combine services over the point of the day and manage them.



4.3 Licence recognition mode, without using button

<Definition of service>

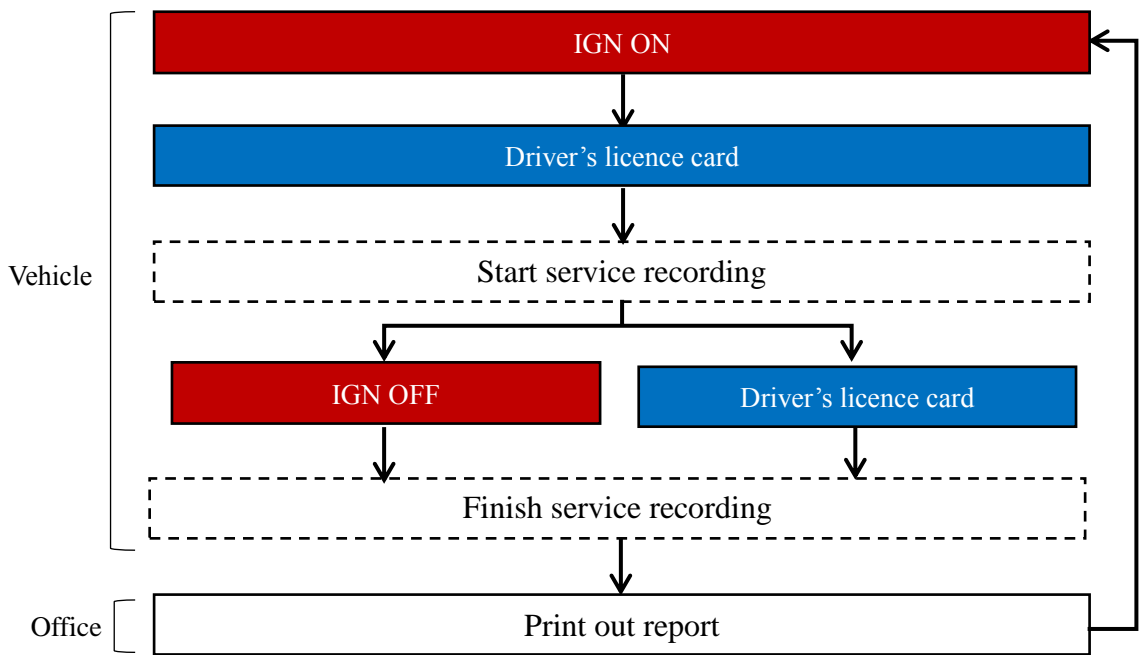
Certification of the license card is a trigger to start service.

Certification of the license card is performed every time IGN ON is enabled, however, the service is recorded continuously if the card is the same as the one certified last. (The point of the day is the same as that in the Non operation mode.)

<Purpose>

Regulated vehicles must be in this mode.

This is used to manage drivers associated with the license card.



4.4 Licence recognition mode, with using button

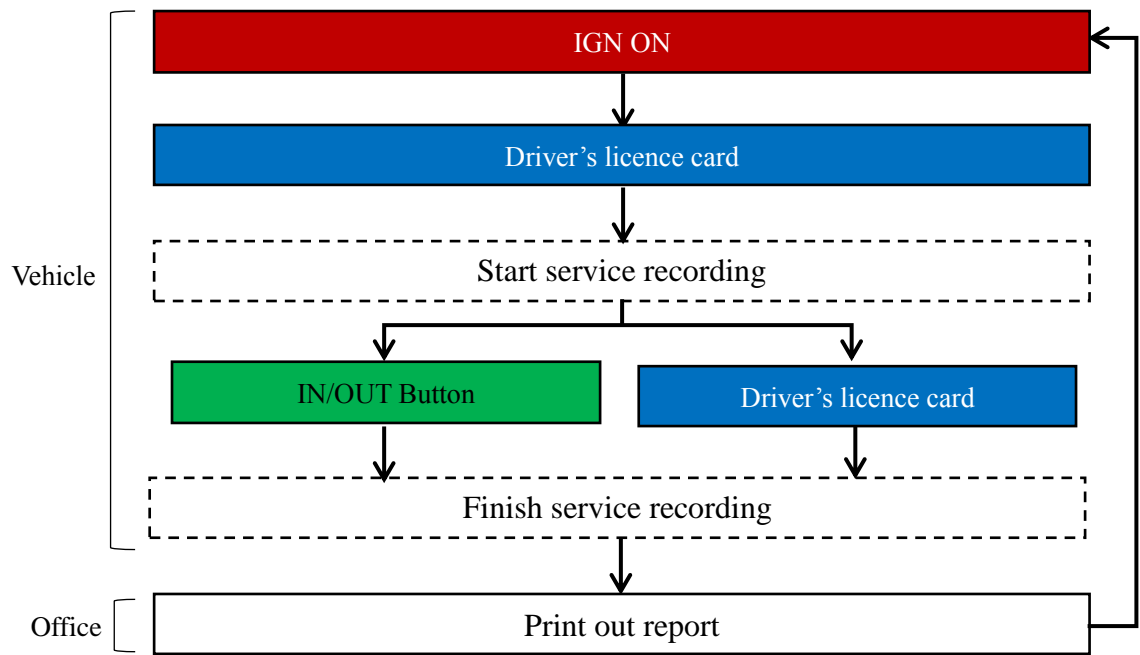
<Definition of service>

Certification of the license card is a trigger to start service.
[OUT] button or license card is a trigger to end service.

If a service continues over the point of the day, it will be continued until Service-Out is performed.

<Purpose>

This is used to manage drivers associated with the license card, or to combine services over the point of the day and manage them.
(Note that this cannot be used for regulated vehicles.)

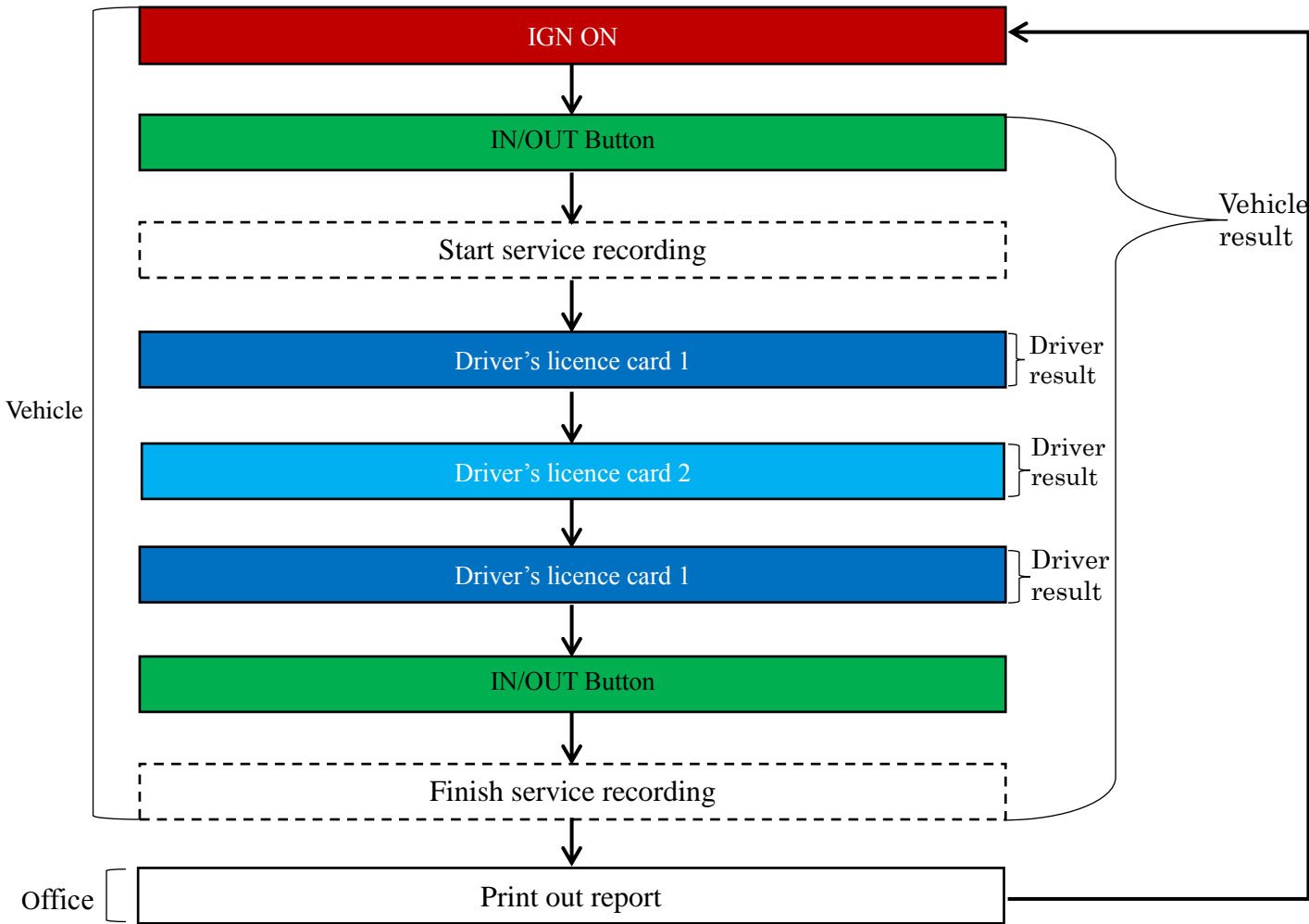


4.5 Integrate by IN/OUT Button

<Definition of service>
In this mode, services between [IN] button and [OUT] button are displayed as a service of one vehicle.
(Services of drivers can be checked in the driver results.)

License card must be slashed every time IGN ON is enabled, as in the 4.3 License recognition mode.
If a service continues over the point of the day, it will be continued until Service-Out is recorded.

<Purpose>
This is used to manage regulated vehicles as follows.
-Manage by vehicle when multiple drivers drive one vehicle.
-For regulated vehicles, combine services which continue over the point of the day and manage them as one service.



5 Revision History

Date of Revision	Chapter Number	Revisions
First edition 01/09/2015	-	Created a new version.
Second edition 15/09/2015	Precautions for use	Added precautions for use of the browser
Third edition 30/09/2015	Last page	Modified contact information of the call center
Forth edition 21/12/2015	2.8.1	Added the following items to the Vehicle Result screen. *Fuel consumption amount, Refuel amount *Transition Graph for Daily Fuel Consumption button
	2.10	Added/modified the following items in the Fuel Consumption Management. *Transition Graph for Daily Fuel Consumption button *Modified the Oil Supply Data Input screen. *Added a Oil Supply Data Edit screen.
	2.10.2	Added Daily Fuel Consumption Transition Graph.
Fifth edition 30/09/2016	2.1.1	Added display of velocity and engine RPM in the Vehicle Detail screen.
	2.2	Added/modified the following items in the Tracking (Vehicle Tracking) screen. *Added Model Name to detailed information. *Added "All" button.
	2.7	Added the following items to the Vehicle Path. *Added CSV button. *Added function to output Event data to CSV file.
	3.3.3.1	Added descriptions of evaluation scores and calculation method in the Evaluation Setting screen.
	3.3.3.2	Added descriptions of setting items in the Vehicle Device Setting screen.
Sixth edition 20/12/2016	2.1.3	Added Station function.
	2.14	Added Station Report function.
	2.2	Modified the Tracking screen.
	3.1	Modified display settings of the Vehicle Path & Tracking screen.
	3.3.6	Added Station Type setting.
	3.3.7	Added Station Setting.
Seventh edition 28/12/2016	3.2	Added setting of calculation method of evaluation scores.
Eighth edition 20/01/2017	2.9.2	Added Combine service index function to the Driver Result.
	3.2	Added automatic service combination setting.

Date of Revision	Chapter Number	Revisions
Ninth edition 20/03/2017	2.1.2	Added descriptions of Fuel Tank Alarm Emergency Pop-up Screen.
	2.6.2	Added descriptions of Data Analysis in the Daily Report Screen.
	2.17	Added descriptions of Fuel Tank in the Fuel Tank Screen.
	3.3.1	Added descriptions of E-mail setting in the Office Setting Screen.
10th edition 20/06/2017	2.8.2	Added descriptions of Edit Vehicle Result pop-up screen.
	2.9.1	Modified descriptions of Add a Driver name pop-up screen.
	2.9.2	Added descriptions of Combine Button
	4.	Added descriptions of Trip Delimiter Setting.
11th edition 04/08/2017	2.6.1	Description of Daily Report <Scatter Graph> added.
	2.6.2	Description of Daily Report <Speed Chart> and <Radat Chart> added.
	3.1	The description below added to the Display Setting. *The item for Daily Report Type setting added
	3.2	Ch Name Setting added to Driving Management Setting
	3.3.5	Target and comment added to Evaluation Setting
12th edition 21/09/2017	2.	Changed the Daily Report/Guidance to Daily Report (Vehicle) and Daily Report (Driver).
	2.6.1	Description of Daily Report (Vehicle) added.
	2.6.2	Description of Daily Report (Driver) added.
	3.3.3.2.2	Description of warning alarm added to Warning Setting.
13th edition 27/03/2018	2.2	Added descriptions of Icon Type.
	2.7	
	3.1	
	2.1.1	Added descriptions of Icon Type, Change Screen Size, and station on the map.
	2.8.2	Changed descriptions of combination of services.
14th edition 18/05/2018	2.	Added DLT Report to (2) [Drive Management].
	2.15	Added descriptions of DLT Report.

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For further information regarding the contact address and phone number of the Hino truck dealer, please refer to the Owner's Manual.

Please note that the contents of this Instruction Manual are subject to change without prior notice.

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