Smart Construction

Smart Construction Fleet Quick Guide

2025.1
Ver5.0-0004

Before you read this document

Please read the introduction first

- This document describes how to set up the Smart Construction Fleet and how to use it on a daily basis.
- This document uses the International System of Units (SI) as the display unit.
  The descriptions, figures and illustrations of this document are based on the information at the time this document was created.
- If you have any questions or concerns, please contact the SMART CONSTRUCTION Support Center.
- About terms of contract, warranty and responsibilities.、
  Please use the app after understanding the Application Software Terms of Use.
- The contents of the screen and display of the app may change depending on the update.
  If there is a difference between what is described in this document and what is displayed on the app screen, follow the app display.

In addition, company names, product names, etc. described in this document are generally trade names, registered trademarks or trademarks of their respective companies.

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System Overview

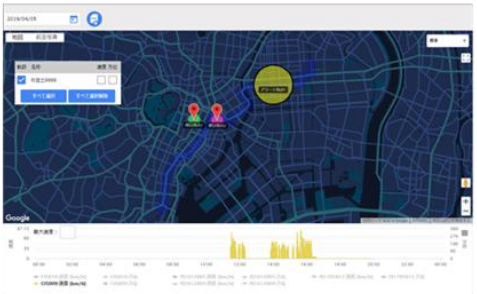
To start using the Smart Construction Fleet

"Smart Construction Fleet" is an application that can share and manage the location of dump trucks, hydraulic excavators and bulldozers.
"Smart Construction Fleet" allows construction vehicle operators to know which dump truck is in which position, and dump truck drivers to know where the construction equipment is in the site and at which position to load and unload.You can easily grasp what to do on the map.
Real-time viewer, vehicle approach notification function for construction equipment operators, alert function for dump drivers, It has functions such as counting the number of loading and unloading, loading result display function of the payload system, work history display, travel history display, and linkage with iOS and Android apps.

You can check the location information of construction equipment, dumps, and guides in real time on your computer.

The approaching notification function allows construction equipment operators and guides to know that the dump is approaching.

You can view the travel history and manage the travel history of daily dump.



View Work History
You can manage the history of daily loading and unloading operations.

Dump information registration
→Payload system linkage
Loading history recorded using an external payload system can be left on the web management menu.

What to prepare and recommended operating environment

Things to prepare

Computer that can operate the Smart Construction Fleet

A smartphone with the Smart Construction Fleet mobile app

or

Landlog

Smart Construction Fleet Device

Recommended operating environment for Web Management menu

←Install and access Google Chrome

Recommended operating environment for mobile application (terminal that has been confirmed to work)

【iOS】
・ Smartphone
iPhone SE (3rd generation)
- Tablet
iPad: Not applicable
【Android】
・ Smartphone
moto g64 5G
- Tablet
Lenovo Tab M10 Plus (3rd Gen) ZAAM0094JP

Notes

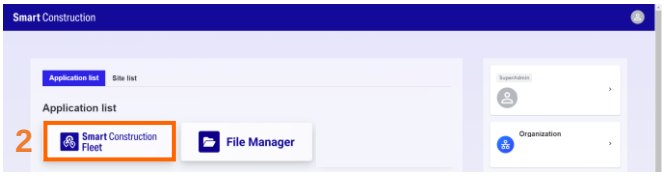
Please note that stable operation outside the recommended operating environment cannot be guaranteed.

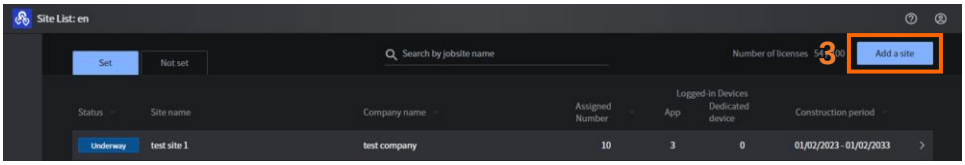
Prepare- Web ver

Add site

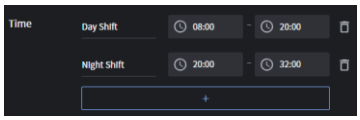
Setting for site using Fleet

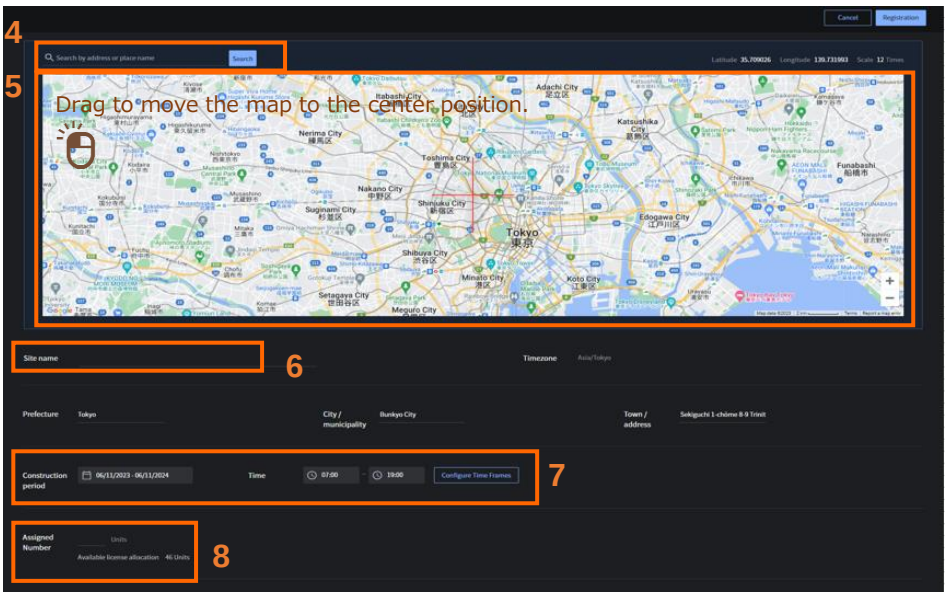
1. Open https://portal.smartconstruction.com/
2. Start “Smart Construction Fleet”
3. Click [Add site]



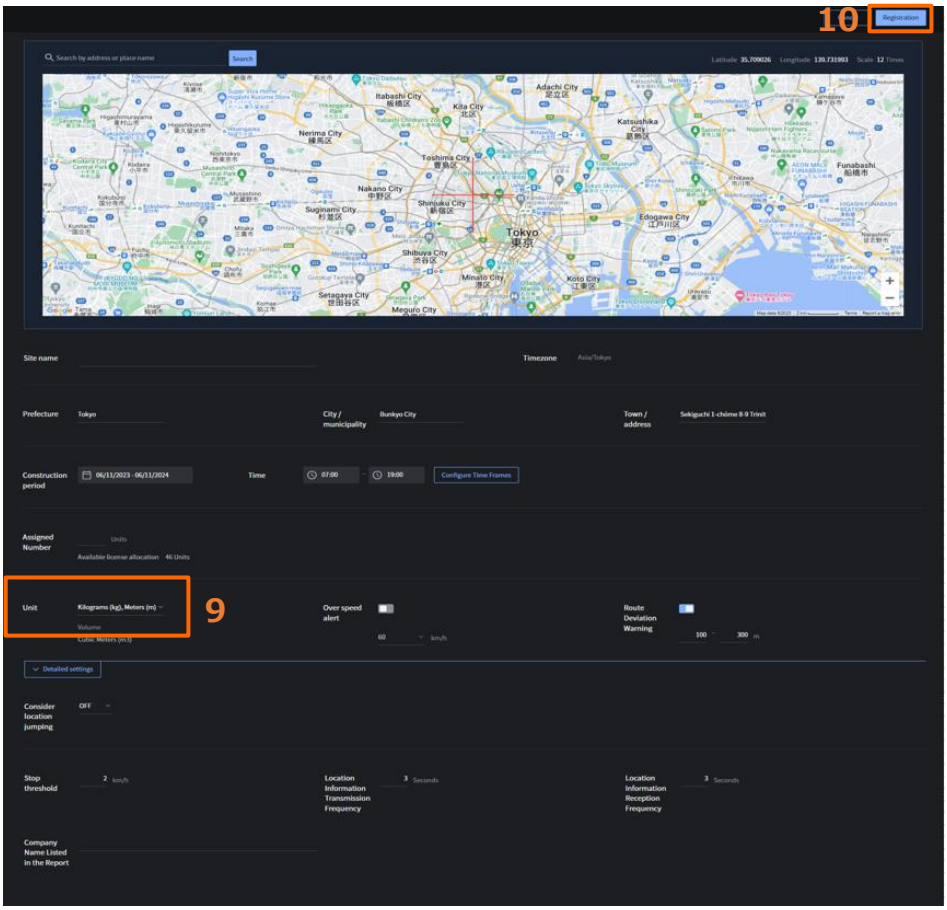


4. Input site’s address, Click [search]
5. Location: Move to the center of map, at the site’s location
   ※Timezone application of map’s center
6. Input site name
7. Input date time and construction period
   Out of setting time, location data will not be sent.
   If setting time is 00:00-24:00 then it will be reciprocal within 24h.
   From setting time textbox, user can setting for multiple time frame.
   If time frame is : 00:00～36:00,can’t setting over 24h from start time of time frame.
8. Input assign number
   In case using ”Smart Construction Fleet Device”, 1 machine can login 3 machines.



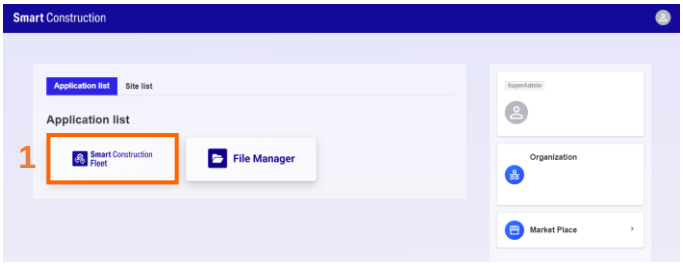


9. Select a unit
10. Click on Register

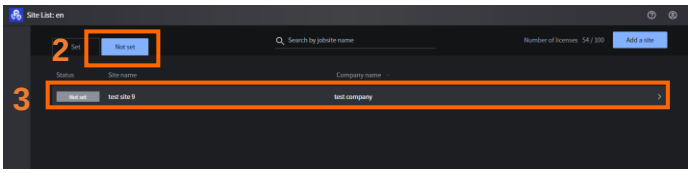


In case the web is created already on Customer Portal

1. Start “SMART CONSTRUCTION Fleet”



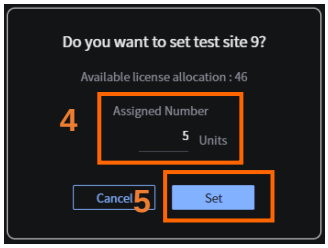
2. Select「Not set」
3. Show [Not set] with the site has not been setting before, let’s click on site name



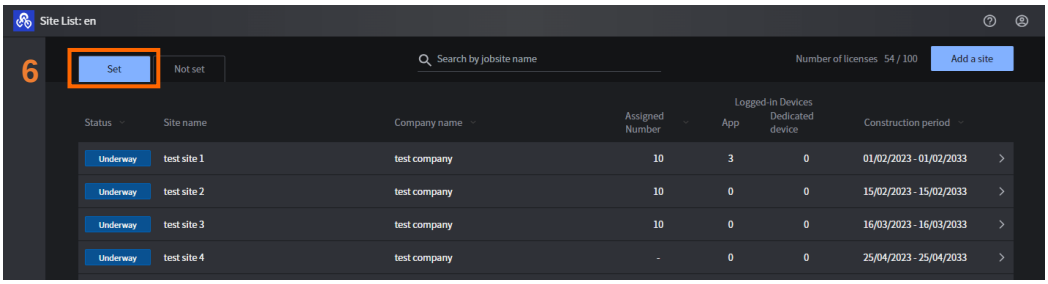
4. Input license is distributed

※ In case using Smart Construction Fleet Device, then 1 device can login được 3 devices

5. Click [Setting]



6 The site after setting successful will be showed as “set” at site list



! Guide list for sites

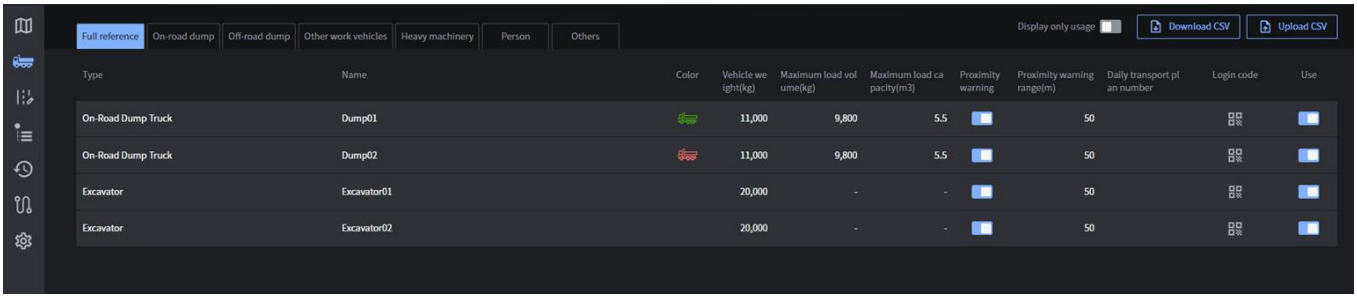
Done Construction period concluded

Underway During the construction period

Preparing Before the construction period

Vehicle registration

Vehicle registration (construction machinery, dump truck,…) and guider to login into Smart Construction Fleet. while login, choose one of vehicle and registered guider here and login.

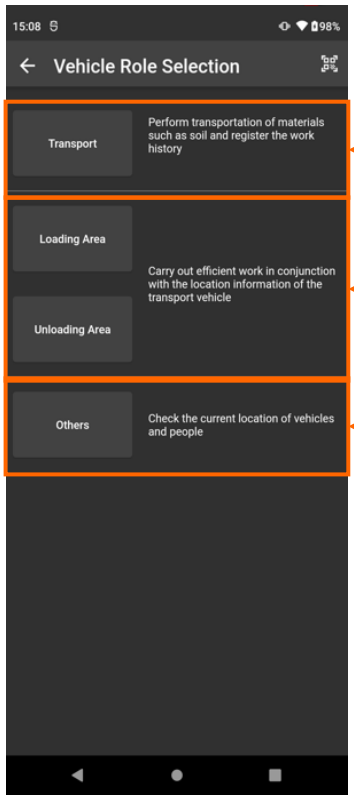


Notes

While register for vehicle, please don't use the character that not depend on environment in name(for example: ①, ⅰ, ❶).
It may not display exactly.

When login into Smart Construction Fleet, user can choose a role (vehicle role) to work with any other vehicle.
*There are 4 kinds of vehicle role: `` Transport '', `` Loading area '' `` Unloading area '' and '' Others', every kind has different function.

To know more detail, please see attached file:
" EN_SC Fleet_New ver_Vehicle's roll "



■Using with vehicles which join on transport.
(Mainly is dump, v.v.)
You can register for your work history.
(Only transported role)

■ Using for the vehicle working around worked site (Loading/unloading). (Mainly is excavator, v.v.)
using vehicle as working area (distribution working area)

■ Vehicle role to check the current machine location or others.
(Mainly is guider, v.v.)

List of vehicles are allowed register

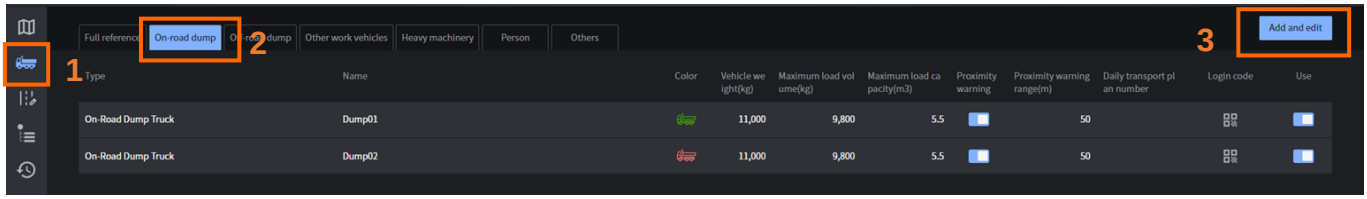
On road		Off-road		Others	
	Vehicle type		**Vehicle type**		**Vehicle type**
	Dump		Articulated dump		Tank truck
			Crawler dump		Mixer car
			Rigid dump		Garbage truck
			Motor scraper		Low bed trailer
			Tractor		Commercial van
					One box
					Bus
					Road patrol car

Heavy machinery		Human		Others	
	Vehicle type		**Vehicle type**		**Vehicle type**
	Shovel		Guider		Camera
	Bulldozer				
	Wheel loader				
	Motor grader				
	Road roller				
	Forklift				
	Rotary car				
	Snow removal truck				

In case of on-road dump

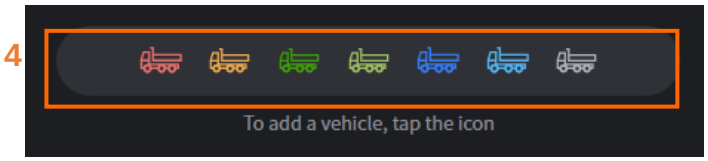
■ In case of on-road dump

1. Select ”Setting vehicle“
2. Select ”On-road dump“
3. click on ”Add and edit”



4. At screen bottom, click on the vehicle’s icon which you want to add

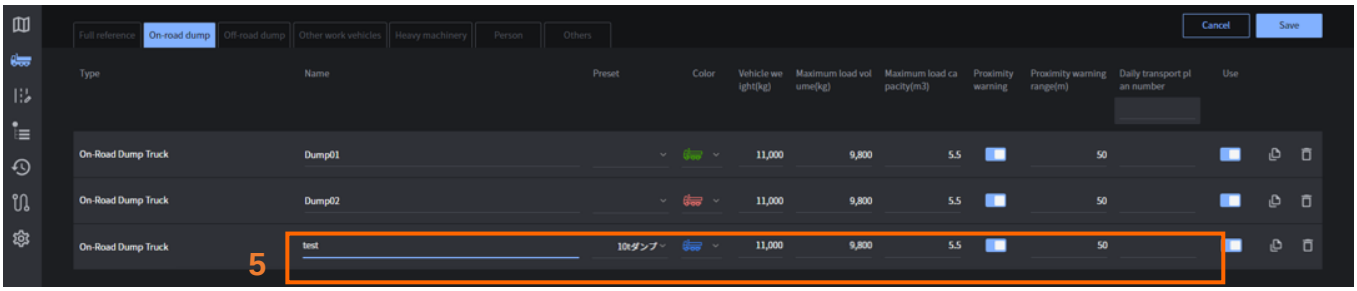
“ on-road dump “



! You can only choose icon color if vehicle’s type is "on-road".

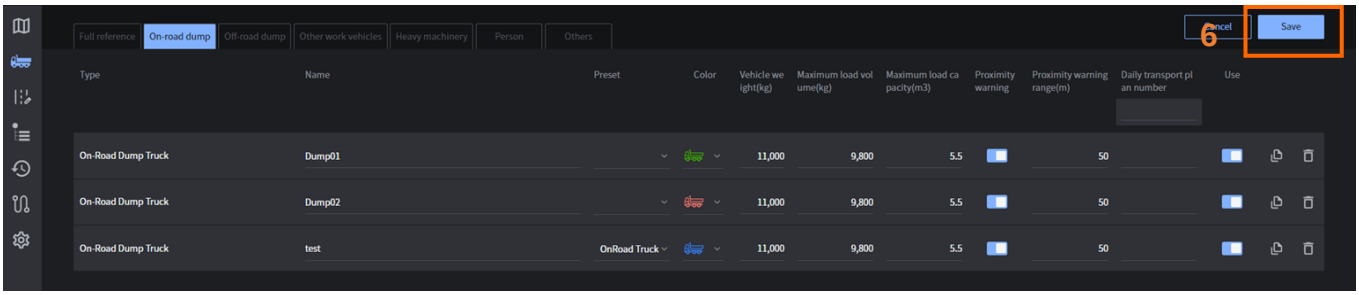
5. Input name

Other information such as vehicle’s weight will be automatically input, you can change it



! The maximum loading soil inputted here will be exchanged to amount of soil per one loading time.

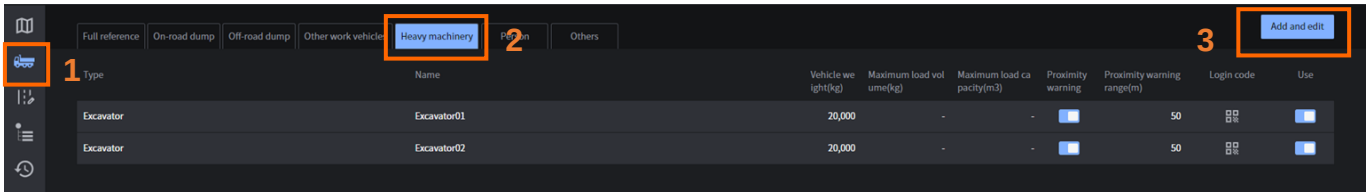
6. click on ”Save”



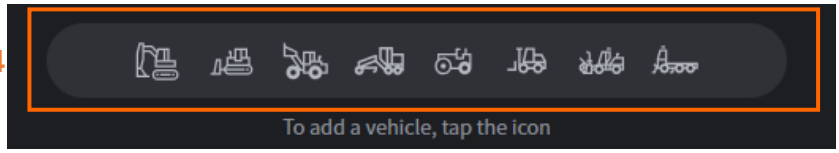
In case heavy machinery

■ In case of heavy machinery

1. Select Setting vehicle”
2. Select ”Heavy machinery”
3. Click on ”Add or edit”

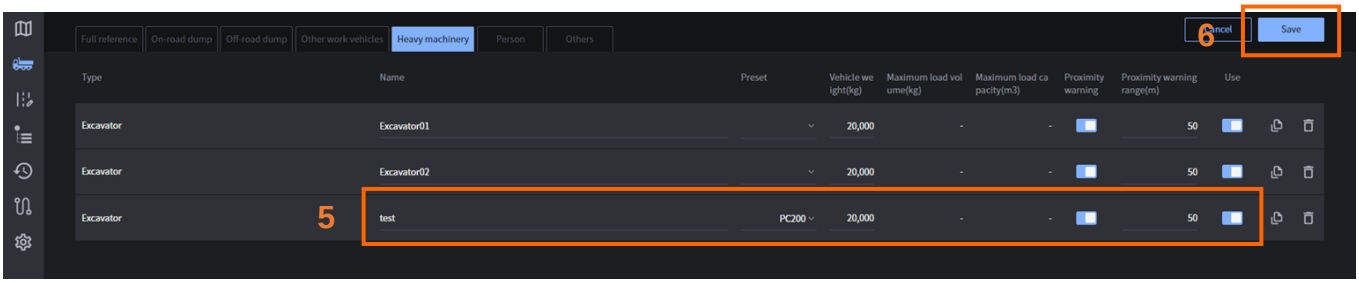


4. Click on the machine’s icon display at the screen bottom



5. Select preset value as the reference value and input machine’s informations
When you choose preset, the information such as machine’s weight will be automatically added and you can change it

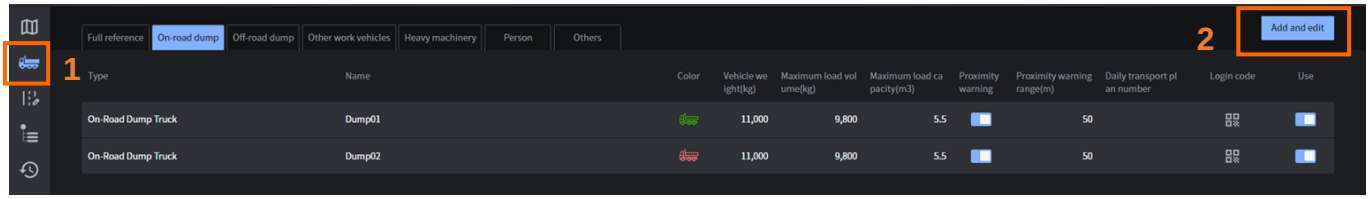
6. Click on ”Save”



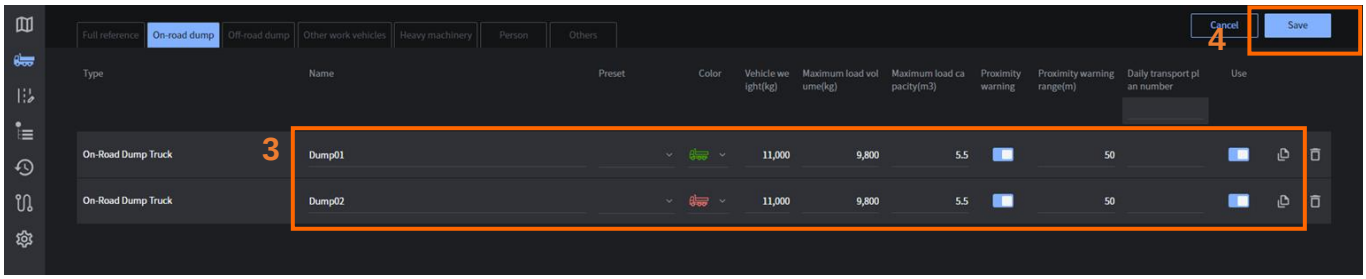
Edit machine’s information after register

■ machine’s information

1. Select「Setting machine」
2. Select「Add and edit」

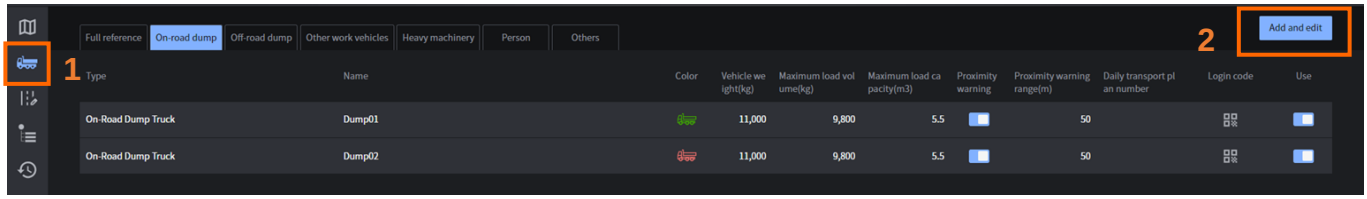


3. Edit setting information
4. Click on「Save」

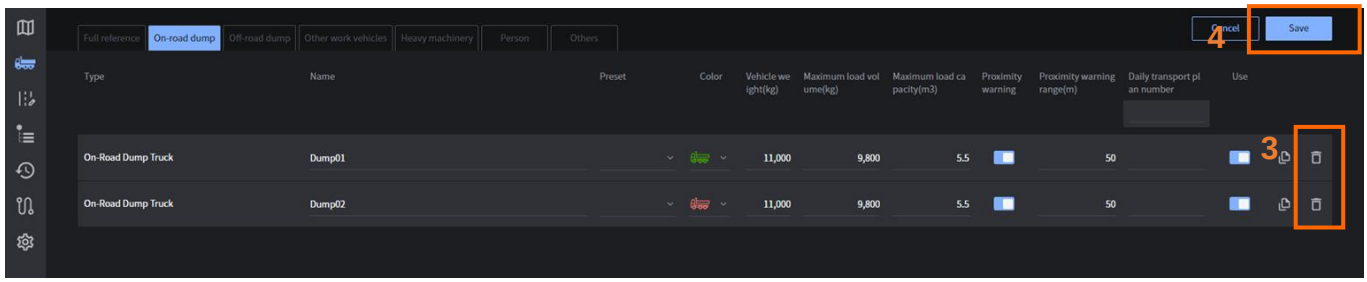


■ Delete machine

1. Select「Setting machine」
2. Click on「Add and edit」



3. Choose delete icon for the machine you want to delete
4. Click on「Save」



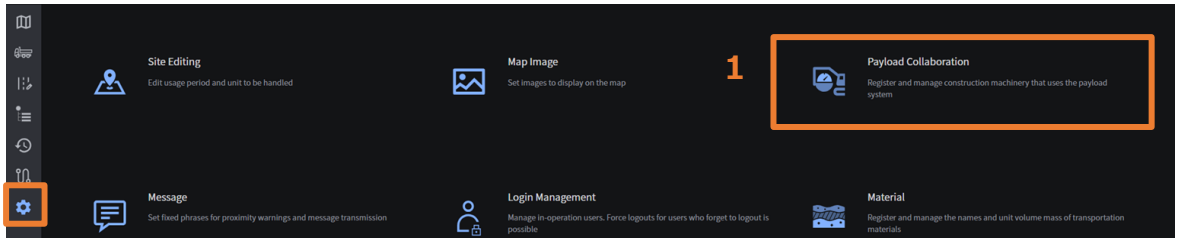
[Optional] Settings for Construction Machine with a Payload Meter

When you register a construction machine with a payload meter, the loading result of the registered machine is displayed in “Payload results”.

Please also check the manual of your payload system.

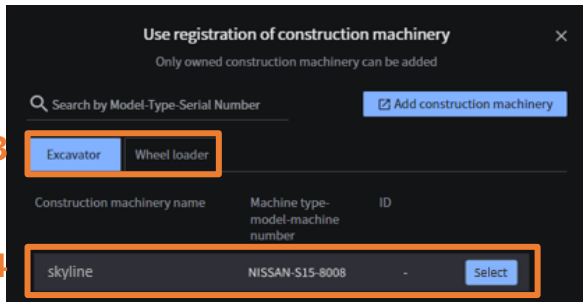
External link : How to set the payload in “Smart Construction 3D Machine Guidance"

1. Log in with the user ID of the company that owns the construction machine, and click “Payload Collaboration”.

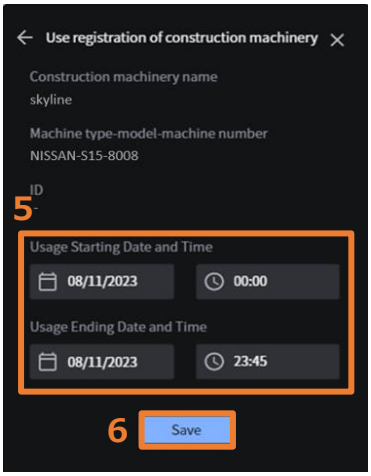


2. Click “Register usage” on the payload linkage screen.

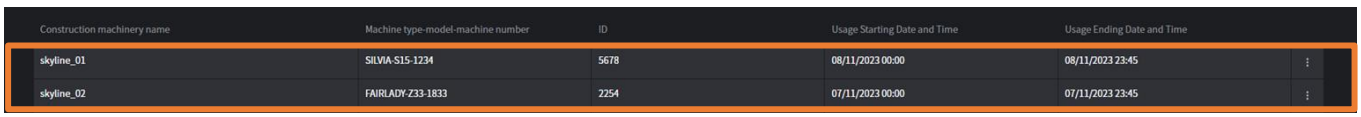
3. Select the type of construction machine.
4. Select the construction machine you want to add.



5. Enter “Usage start date and hour” and “Usage end date and hour”.
6. Ensure that the information to be registered is correct, and click “Register”.



7. The construction machine with a payload meter you have registered is displayed.



Unregistered owned construction machinery

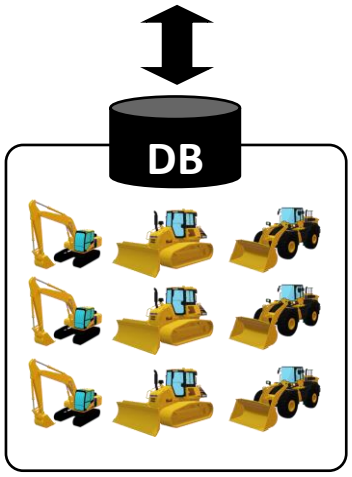
Note

●In case you have not registered for your construction machinery, you can't find it when searching. Please login by id of construction machinery owner and register by following steps:

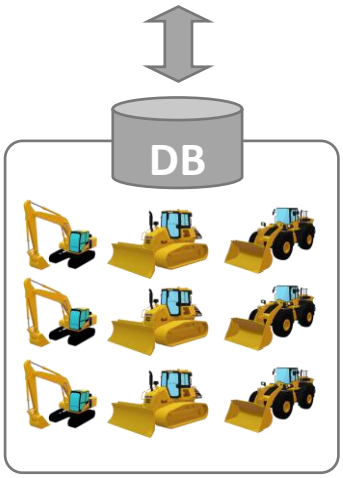
●The database for construction machinery is Smart Construction Fleet used is different with database for Smart Construction Pilot (web application), so, even if your construction machinery was registered from it, it still need to register.

●Registered construction machine here can use on Smart Construction Dashboard. Registered in construction machinery database.

Smart Construction Pilot

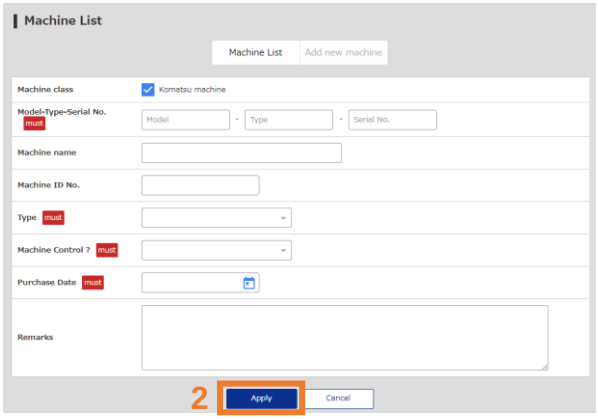


SMART CONSTRUCTION Dashboard
SMART CONSTRUCTION Fleet



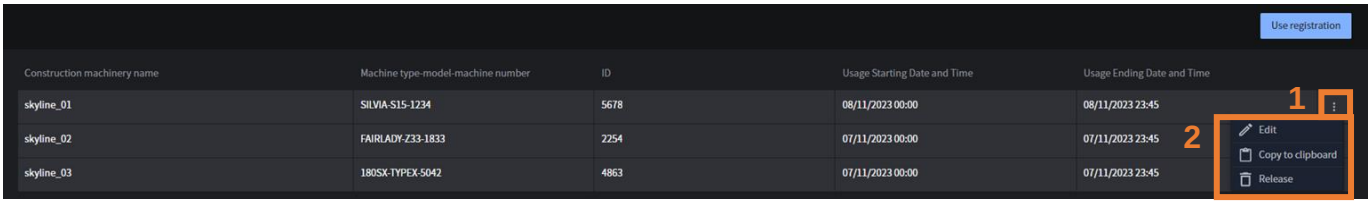
1. Click on "Add construction machinery"

2. Recheck for registration information, then click on "Apply"

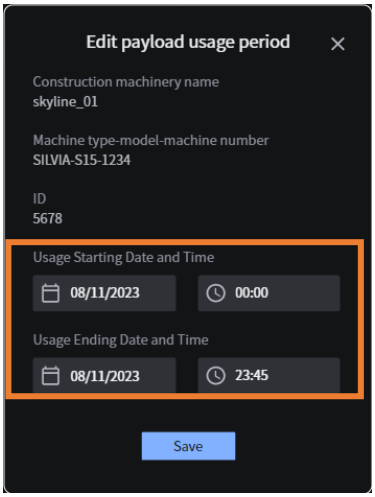


Edit payload construction machinery

1. Click on “ ⋮ ”

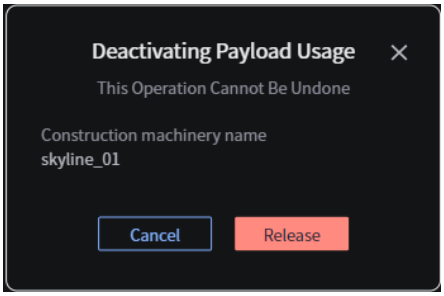


- ”Edit” allow to change start date and end date.



- “Copy to clipboard” Copy payload construction machinery information.

- ”Release” You can unactive payload construction machinery.



Note

- Payload collaboration can’t be perform if the construction machinery has not registered or it is expired.
- When the using of payload finish, it will be used at another place.

We suggest that you should cancel the registration of payload machinery.

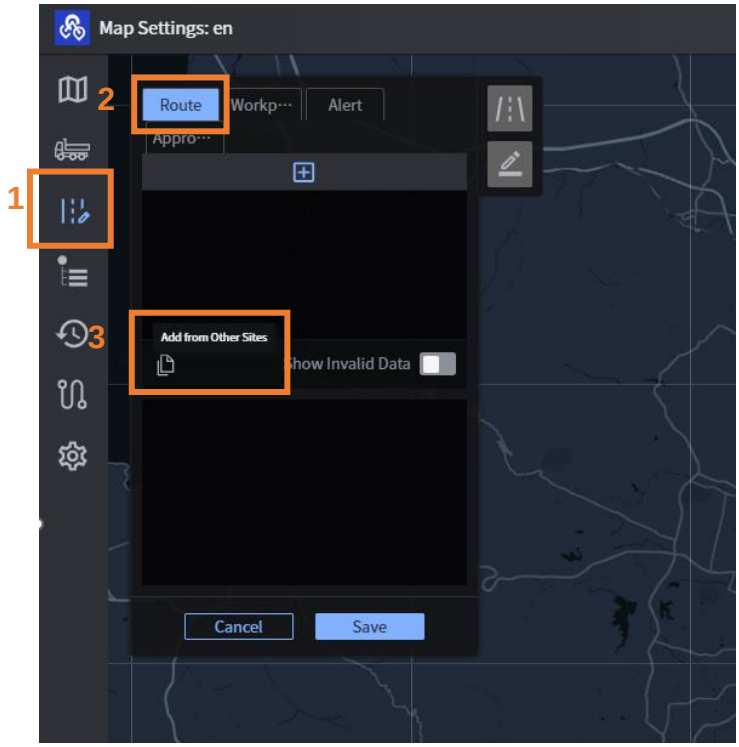
[Optional] Traveling Route Settings

Set it if you want to show the traveling route on the map screen such as the real-time viewer or the mobile application.
For the site administrator, you can check in real time whether the driver is operating the correct route, and for the driver, whether the route to drive on a daily basis is correct.

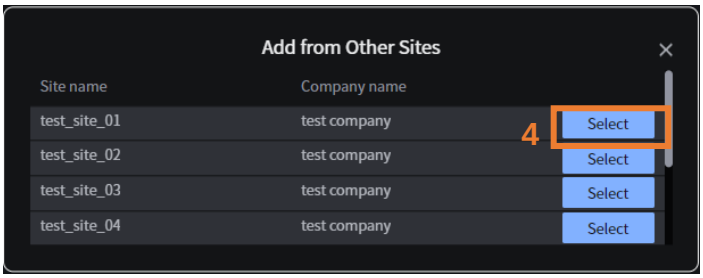
When copying the route from other site

You can copy the route if you have already used Smart Construction Fleet and there is a site where the route has been set.

1. Display the map setting screen.
2. Click “Route”.
3. Click “Add from another site”.

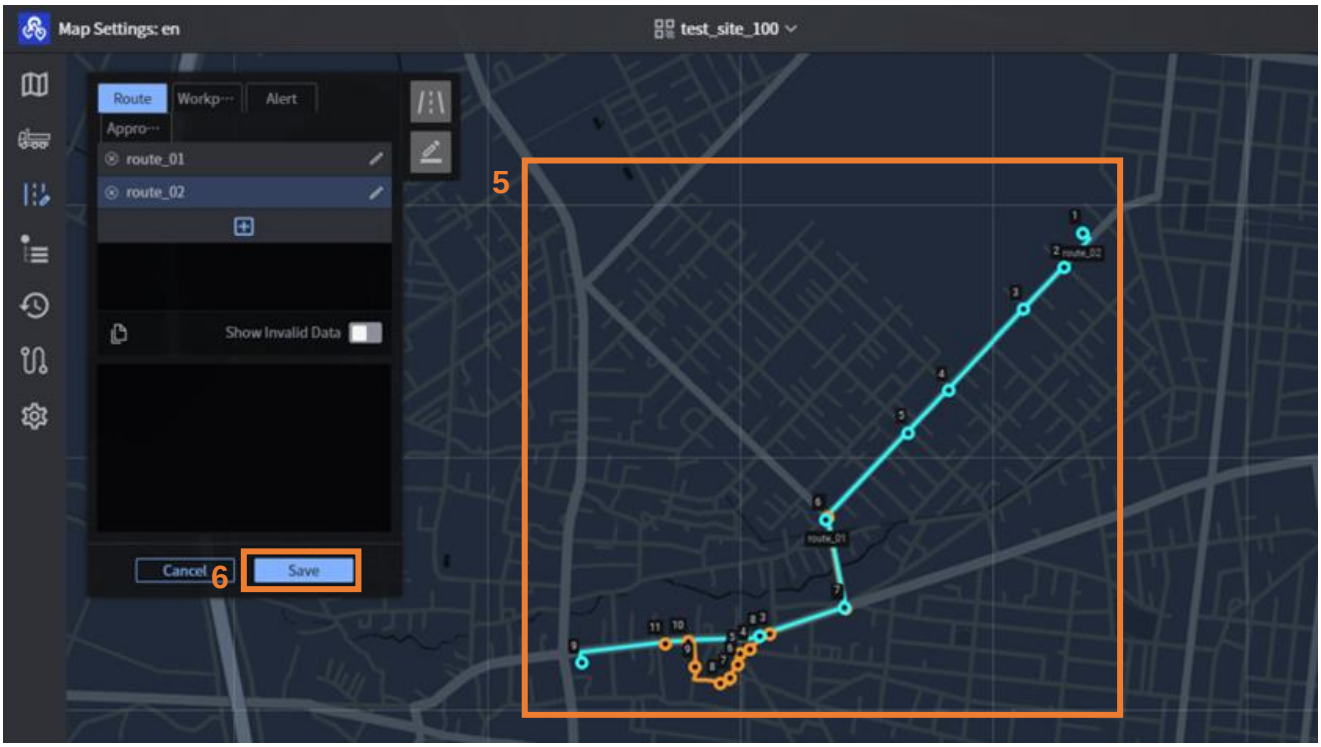


4. Select the site to be copied.
   Sites for which your account is registered as “Site supervisor” are displayed in a list.



5. The route of selected jobsite is copied
The route that created before will not be overwritten.

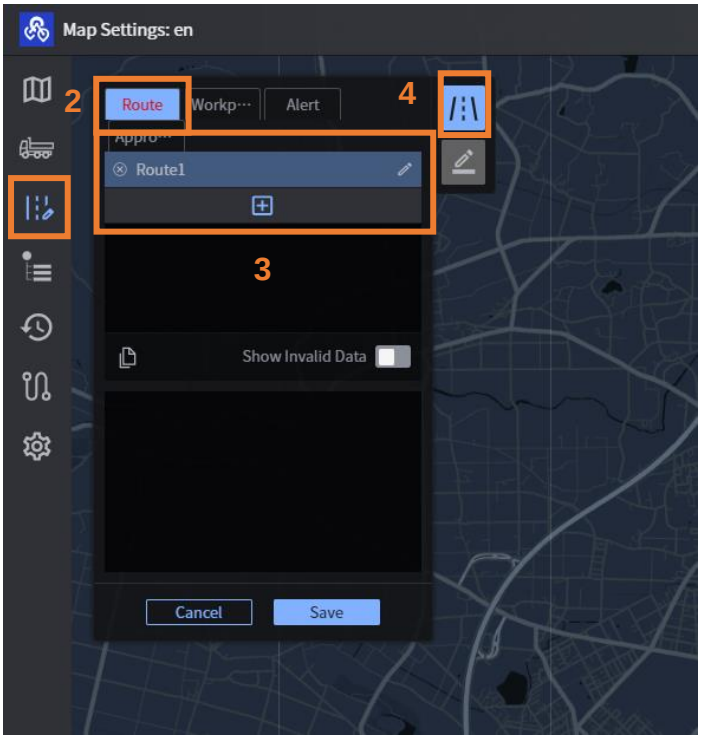
6. To confirm the route, click on “Save”



When do not copy the route from other site

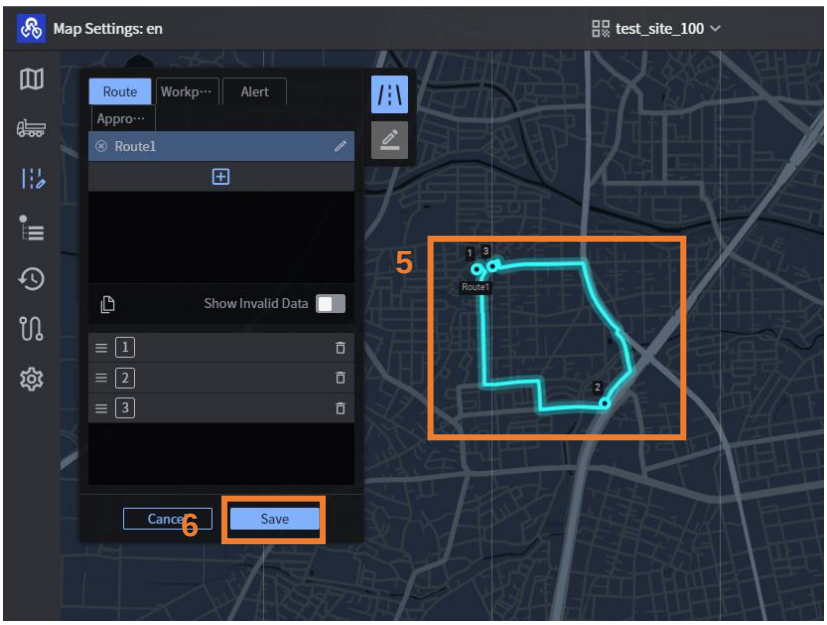
When create route by the road

1. Display the map settings menu
2. click on ”Route”
3. Click on “+” to add new route
4. Choose ON for “Route by the road”



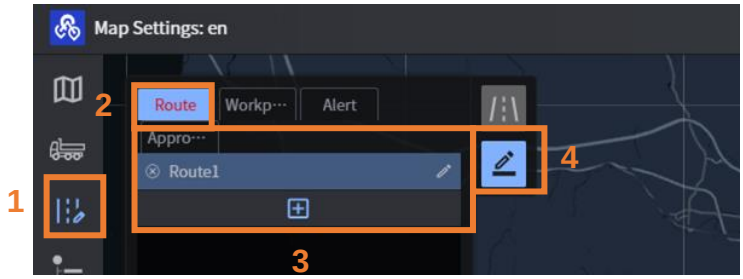
5. Click on Start point and End point of the route.
Every time you click on map, the route between the points will be automatically searched
By click on the points on, v.v. if needed, you can draw the transported route conveniently.

6. when you finish selecting route, click on “Save”



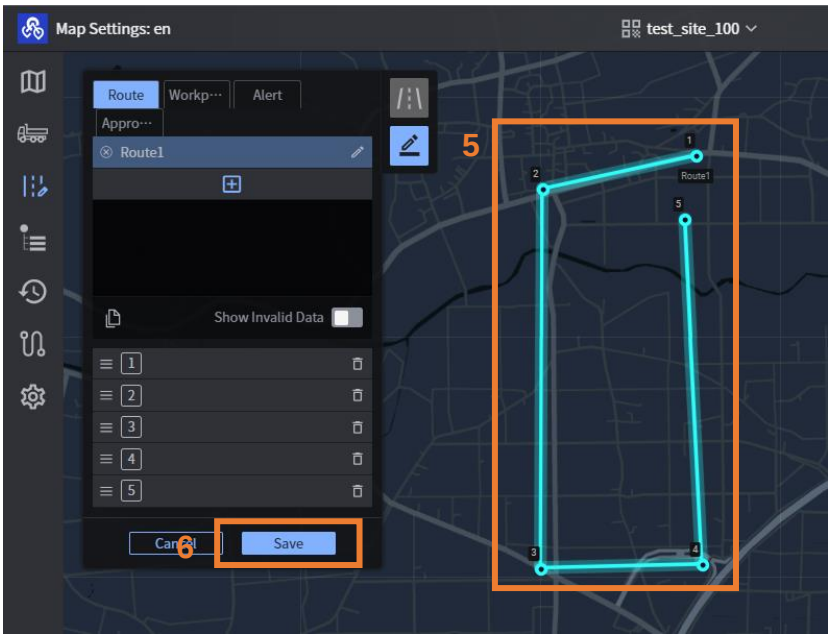
When creating a handwritten route

1. Display the map setting screen.
2. Click “Route”.
3. Click “+” to add the new route.
4. Set “Handwritten route” to ON.

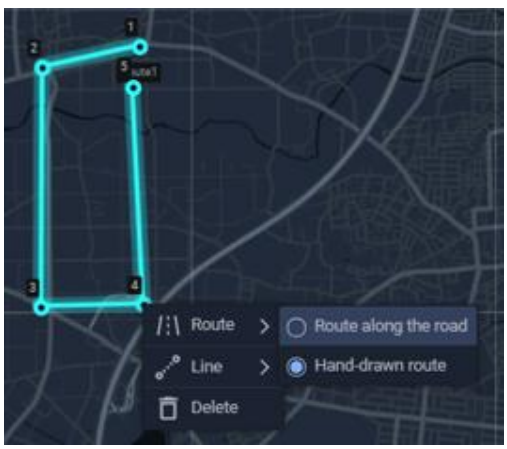


5. Click the route in order from the starting point.
   The pins are connected by a straight line.
   Click at an intersection, etc. as necessary to smoothly draw the planned transportation path.

6. After inputting the route,
   click “Save”.



* You can change whether to input “Route along road” or “Handwritten route” by clicking the pin.



[Optional] Creating a Work Point

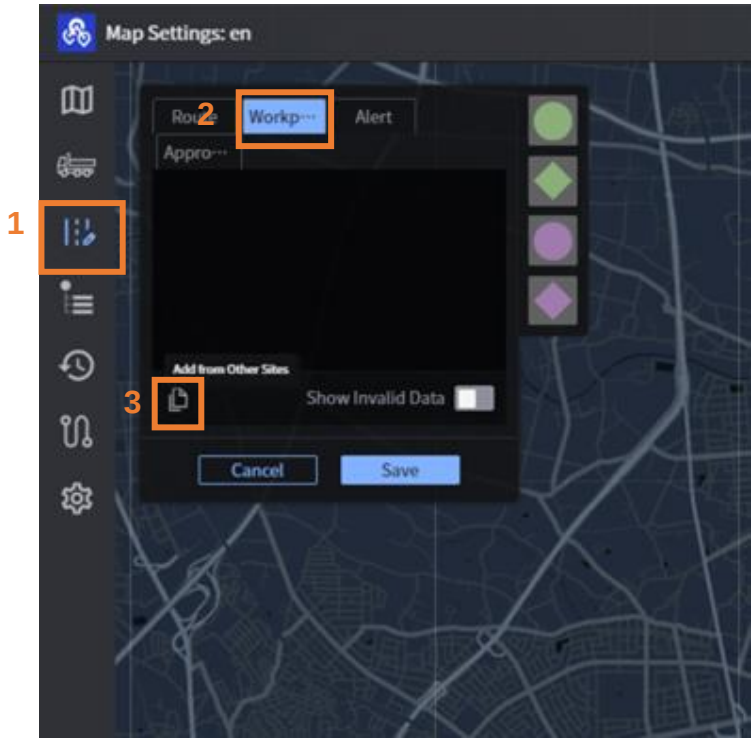
For the vehicle that has been logged in as the role of the dump truck (vehicle role: transport), you can register the work history (loading and unloading history).

For details on the vehicle role, refer to the separate sheet “SCFleet_New Ver_vehicle role.xlsx”.

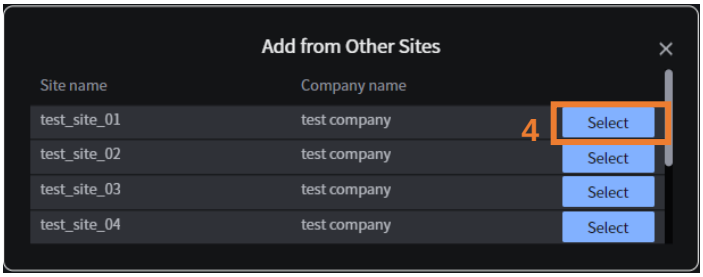
When copying the work point from other site

If you have already used Smart Construction Fleet and you have a site that has been set as a work point, you can copy the work point.

1. Display the map setting screen.
2. Click “Work point”.
3. Click “Add from another site”.

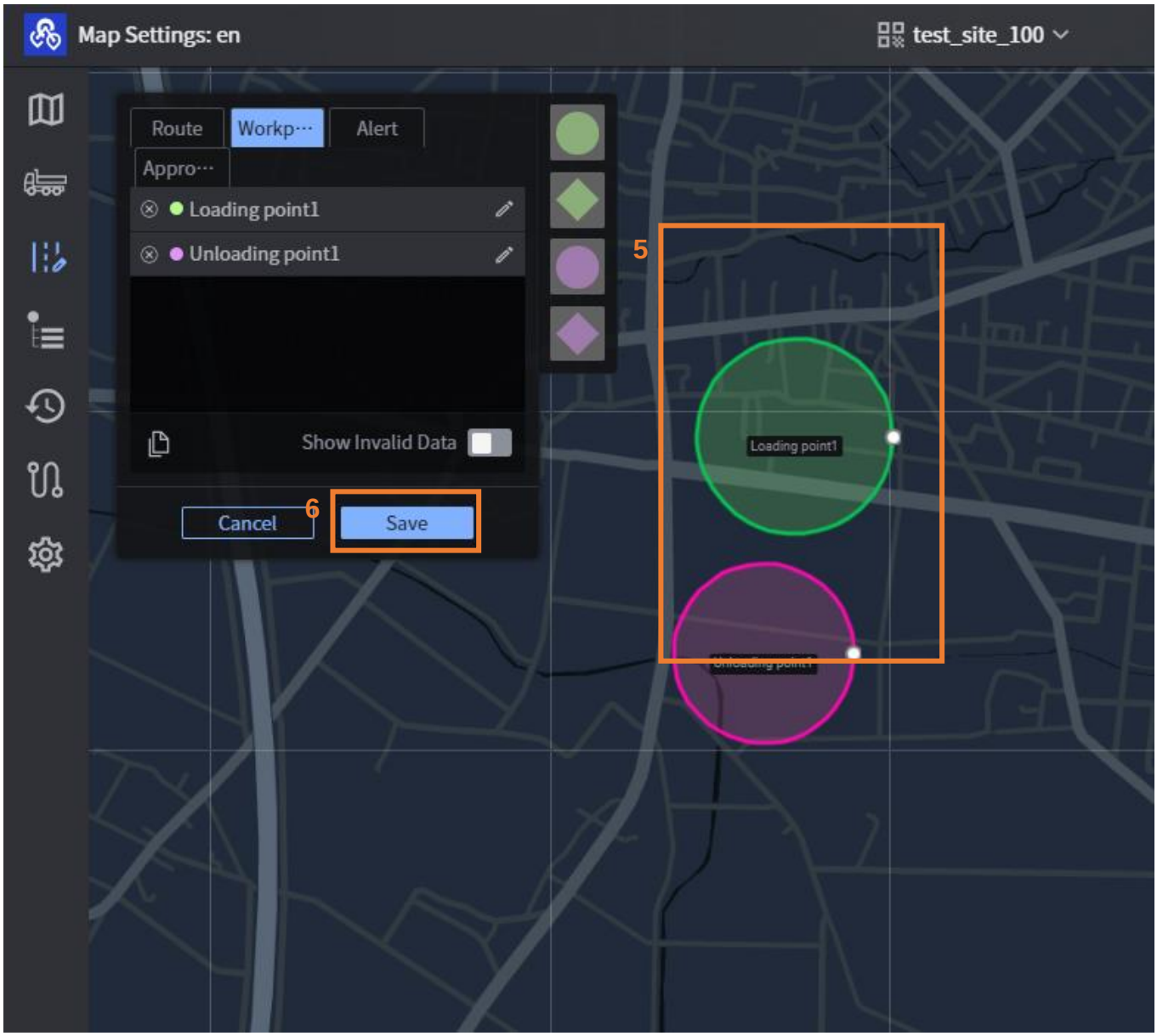


4. Select the site to be copied.
   Sites for which your account is registered as “Site supervisor” are displayed in a list.



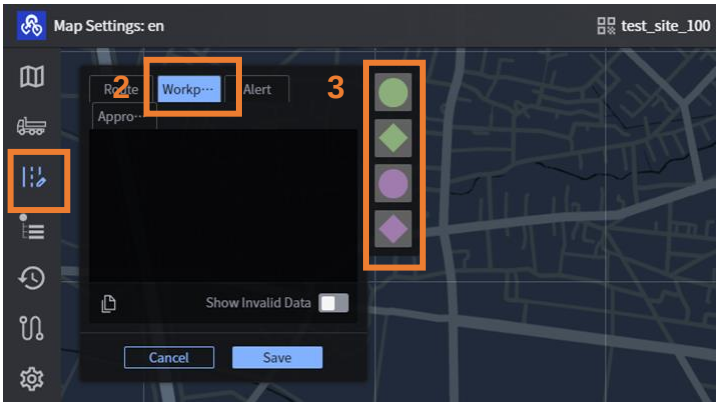
5. The selected workplace is copied.
The initial created workplace will not be overwritten..

6.When you confirm the workplace, click on "Save"



When do not copy workplace from other site

1. Display the map settings menu
2. click on ”Workplace”
3. Kind of work site you want to create (loading circle | loading free form| unloading circle | unloading free form)



Select when choose “loading Circle”

Select when choose “loading free form”

Select when choose “unloading Circle”

Select when choose “unloading free form”

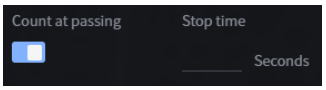
4. Click on the map
5. After selecting workplace, click on “Save”

when you input “Location name” will display workplace on map screen.

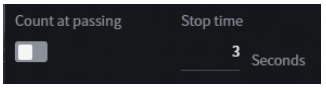
It is setting value to automatically count the work history.

* Register for automatically count the work history by in and out an area.

●If "Count at passing" is ON *Cann’t input Stop time
Even when the machine does not step, it can still in and out workplace.
Record work history.



● If “Count at passing” if OFF and Stop time is setted
After entering the workplace, stopping, and completing the set stopping time, recording of the work history is achieved by leaving the workplace.



Circle image

Size can be changed

Free form image

The shape can be changed

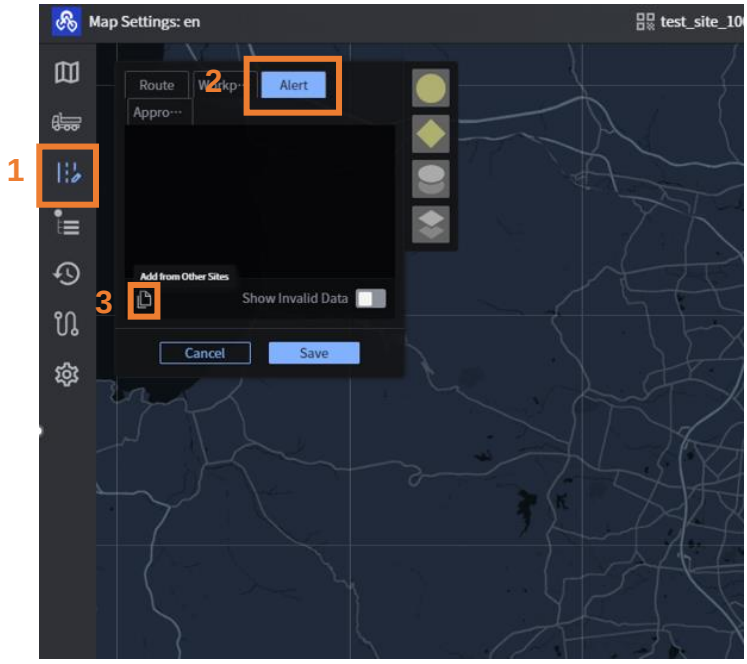
[Optional] Creating an Alert Point

An alert message is issued when a worker who has logged in on the mobile application passes a specific point.

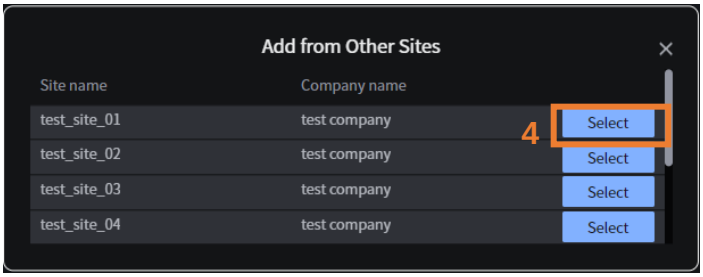
When copying the alert point from other site

If you have already used Smart Construction Fleet and you have already set an alert point, you can copy the alert point.

1. Display the map setting screen.
2. Click “Alert”.
3. Click “Add from another site”.

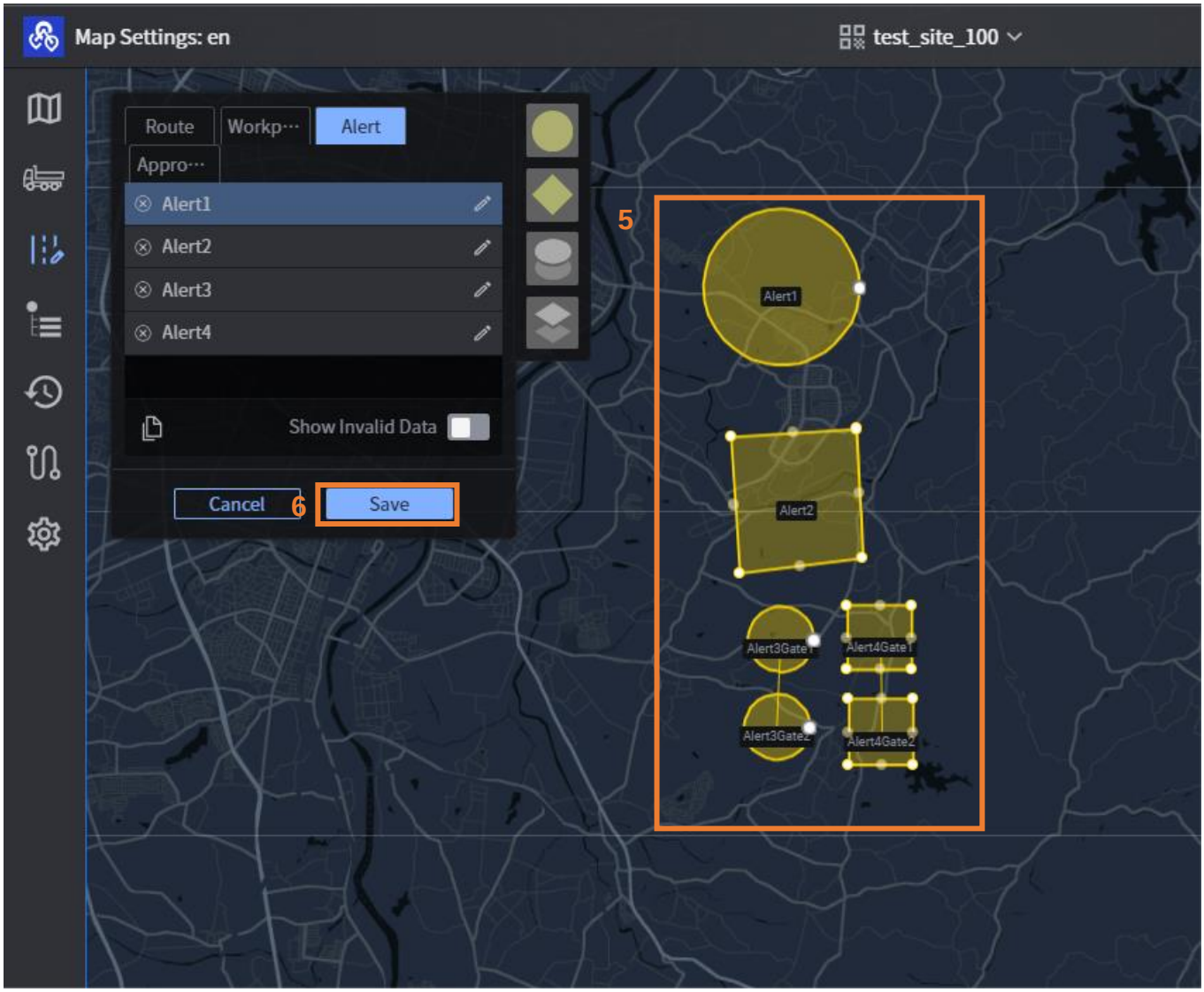


4. Select the site to be copied.
   Sites for which your account is registered as “Site supervisor” are displayed in a list.



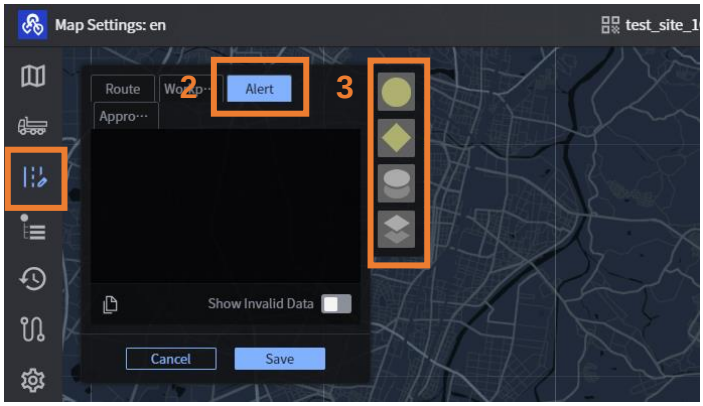
5. The alert point of the selected site is copied
The alert point that were originally created will not be overwritten.

6. Click "Save" after confirming the alert point.



When not copying the alert point from other site

1. Display the map setting screen.
2. Click “Alert”.
3. Select the type of alert point you want to create (Circle | Freeform | Gate Circle | Gate Freeform).



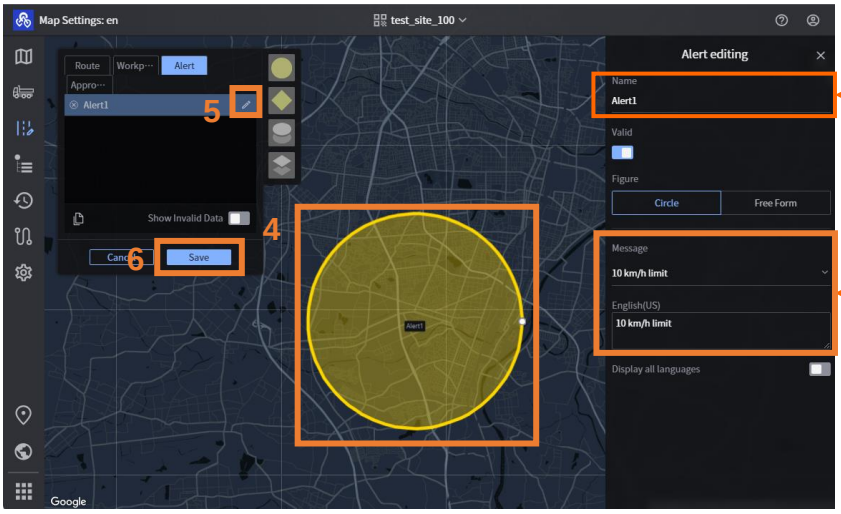
Select when creating Circle

Select when creating Freeform

Select when creating Gate Circle

Select when creating Gate Freeform

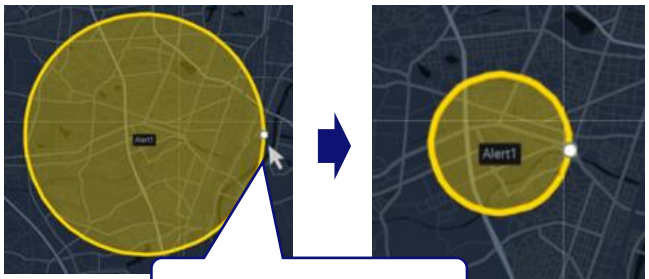
4. Click on the map.
5. Click the “ ” mark.
6. After inputting the alert point, click “Save”.



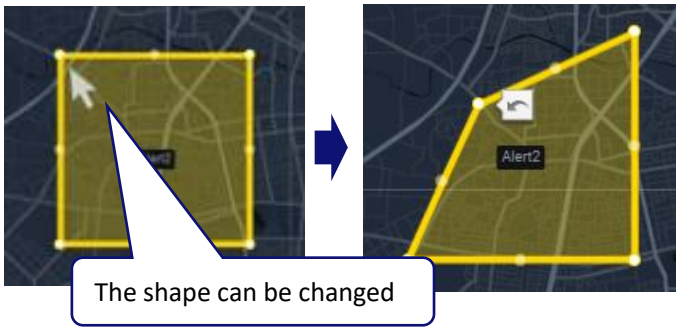
Enter “Name” and it will be displayed at the alert point on the map screen.

When a message is selected from the list of fixed sentences, the read words are automatically input in the column of the language used.
Read words can be edited freely.

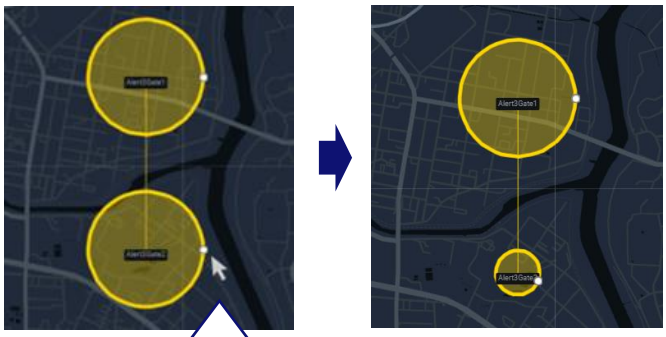
Circle image



Free form image



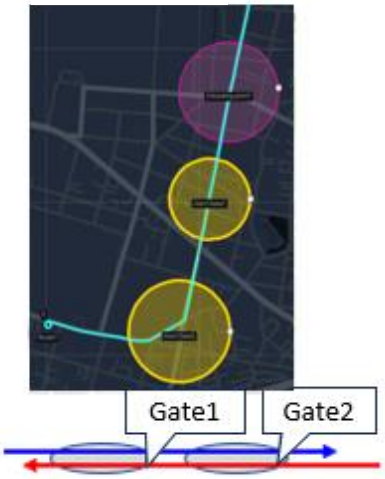
Gate circle image



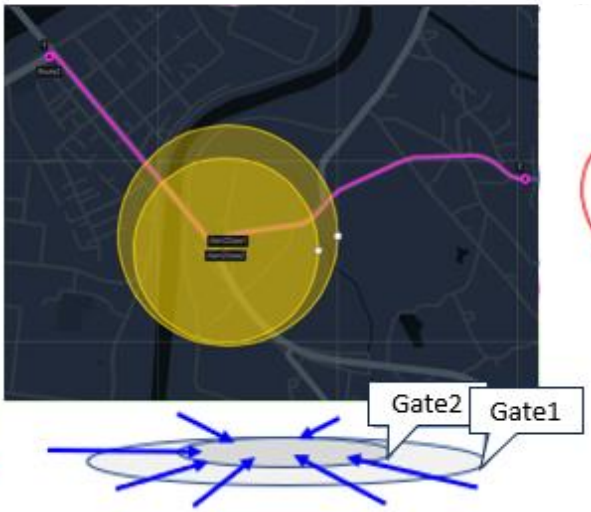
Gate free form image

Setting Gate（Example）

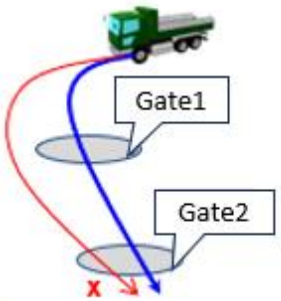
One-way



Multiple directions



Gate operation rules



The gate operates when passing through in the sequence from 1 to 2

[Optional] Approach Notification Settings

When a vehicle which is logged in and whose role is “Transport” approaches a loading point, the message set on the management screen is given by a screen display and a audio reading, to a vehicle to which a role of “Loading/Unloading area” is assigned.

Note

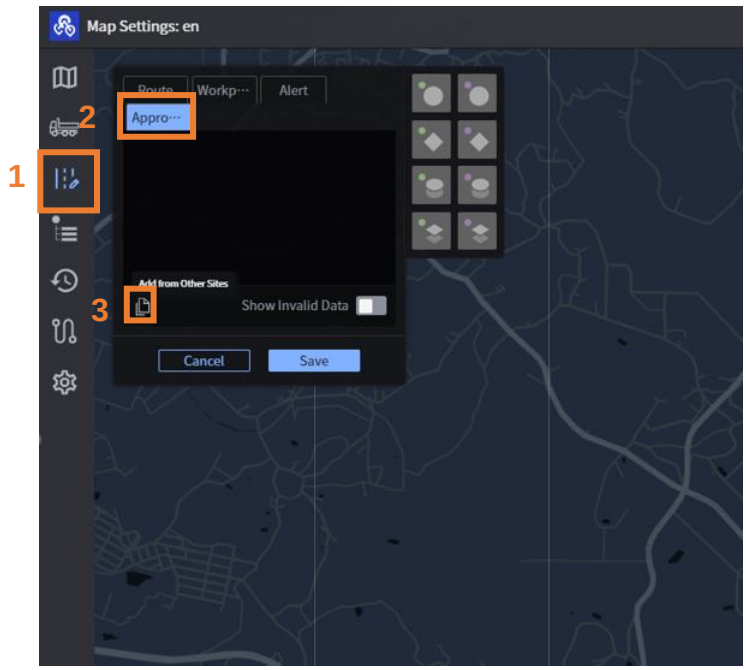
- For the loading approach notification point, the vehicle that is logged in with the vehicle role “Loading area” will be notified.
- For the unloading approach notification point, the vehicle that is logged in with the vehicle role “Unloading area” will be notified.

For details on the vehicle role, refer to the separate sheet “SCFleet_New Ver_vehicle role.xlsx”.

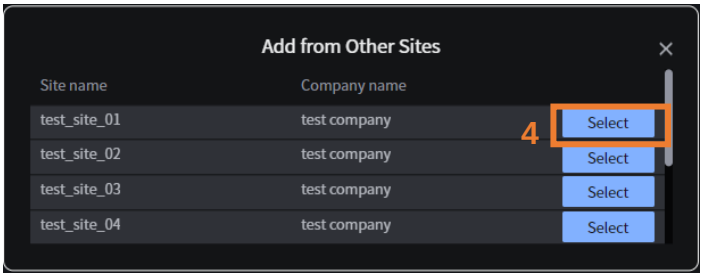
When copying the approach notification point from other site

If you have already used Smart Construction Fleet and you have a site that has been set as an approach notification point, you can copy the approach notification point.

1. Display the map setting screen.
2. Click “Approach notification”.
3. Click “Add from another site”.

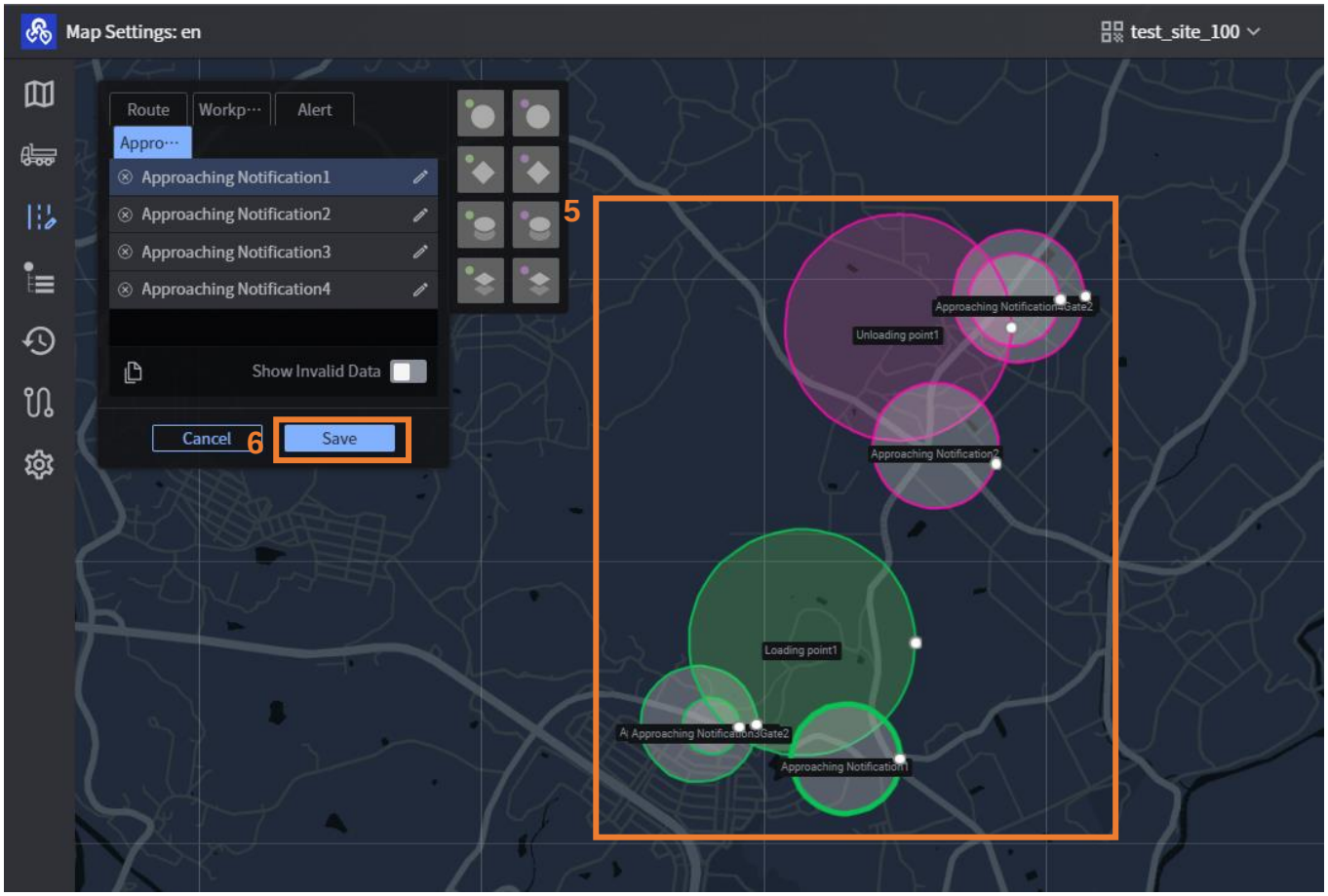


4. Select the site you want to copy
A list of sites where your account is registered as "Site Supervisor" will be displayed.



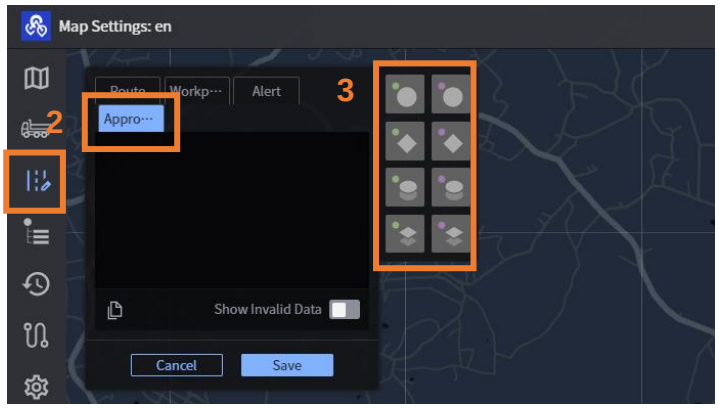
5. The approaching notification point of the selected site is copied
The approach notification point that was originally created will not be overwritten.

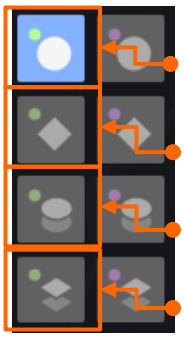
6. Click "Save" after confirming the approaching



When not copying the approach notification point from other site

1. Display the map setting screen.
2. Click “Approach notification”.
3. Select the type of approach notification point you want to create (Circle Loading | Circle Unloading | Freeform Loading | Freeform Unloading | Gate Circle Loading | Gate Circle Unloading | Gate Freeform Loading | Gate Freeform Loading)





Select when creating Circle Loading.

Select when creating Freeform Loading.

Select when creating Gate Circle Loading.

Select when creating Gate Freeform Loading.

Select when creating Circle Unloading.

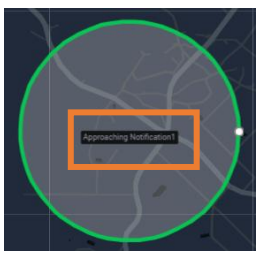
Select when creating Freeform Unloading.

Select when creating Gate Circle Unloading.

Select when creating Gate Freeform Unloading.

4. Click on the map.
5. Click the “ ” mark.
6. After inputting approach notification point, click “Save”.

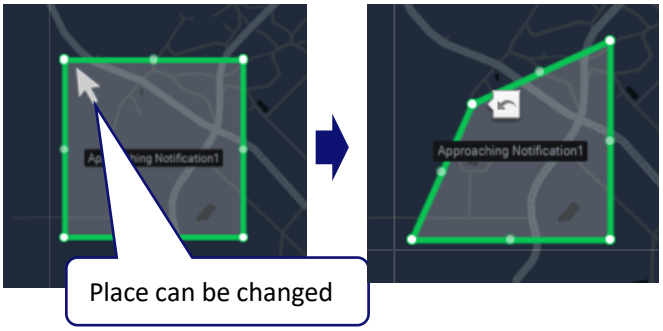
Enter “Name” and it will be displayed at the approach notification point on the map screen.

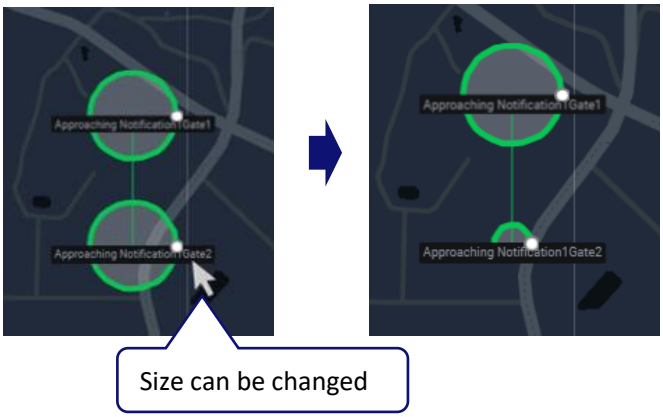


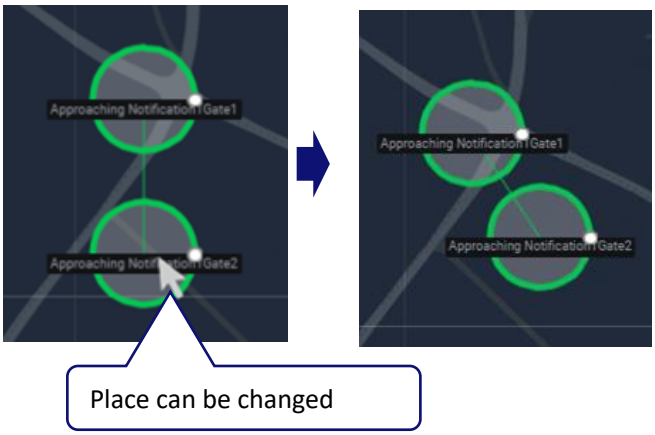
Select “Custom” to arbitrarily set the words for approach notification.

Circle image

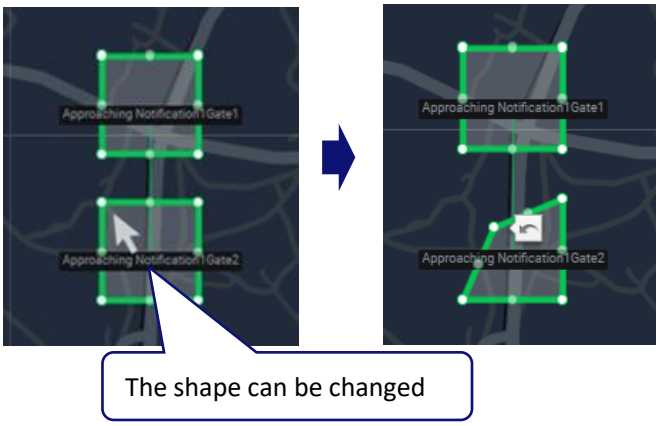
Free form image

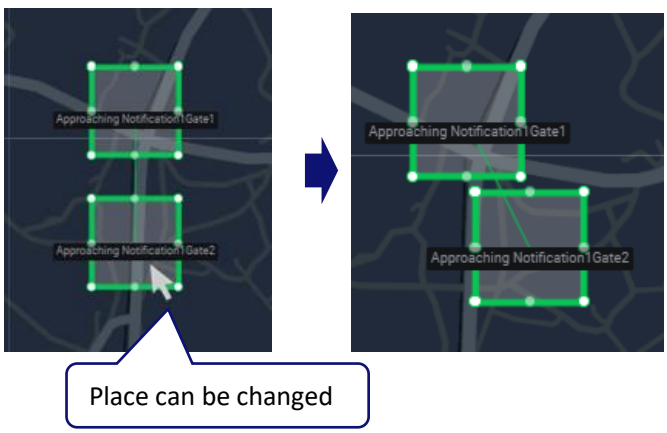






Gate free form image

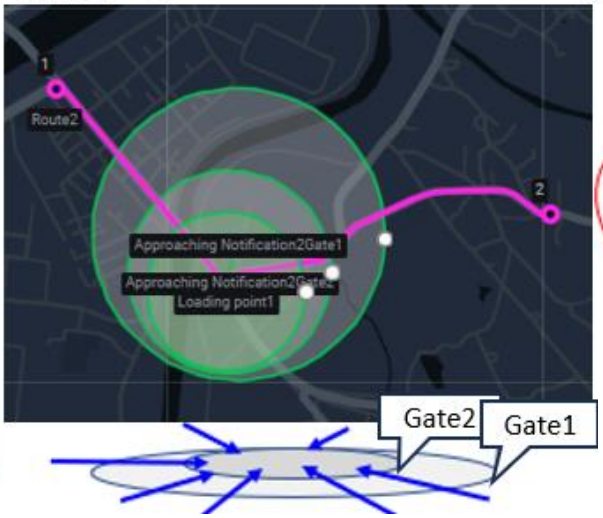




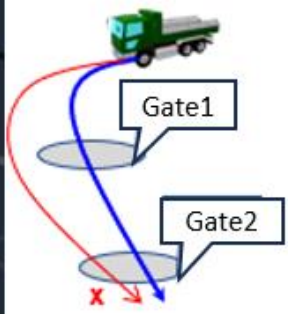
Setting Gate（Example）

One-way

Multiple directions



Gate operation rules



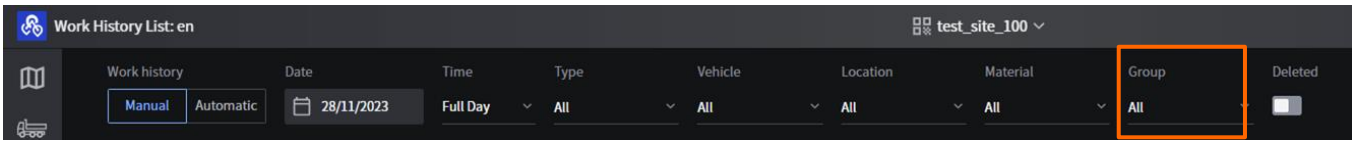
The gate operates when passing through in the sequence from 1 to 2

[Optional] Group Settings

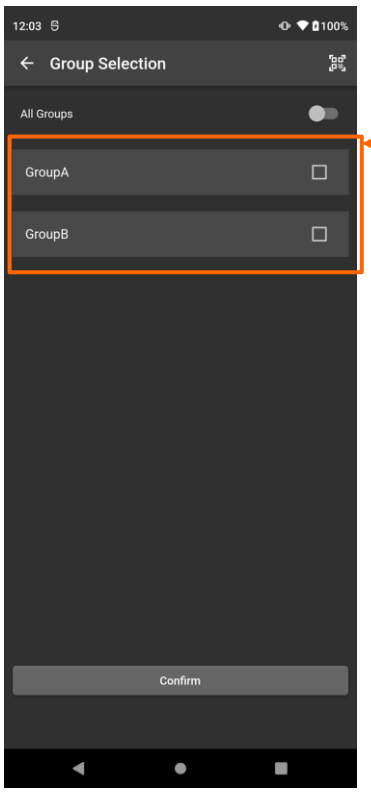
You can set groups of map objects (route, work point, alert point, and approach notification point). For the vehicle that has logged in the mobile application, only the map objects of the specified group are shown.
This will never register or notify the work history of groups your vehicle does not belong to.
On the web screen, you can narrow down the work results by group and display them.

For details on the grouping, refer to the separate sheet “SCFleet_New Ver_ grouping.xlsx”.

List of Work History Screen



Belonging group selection screen

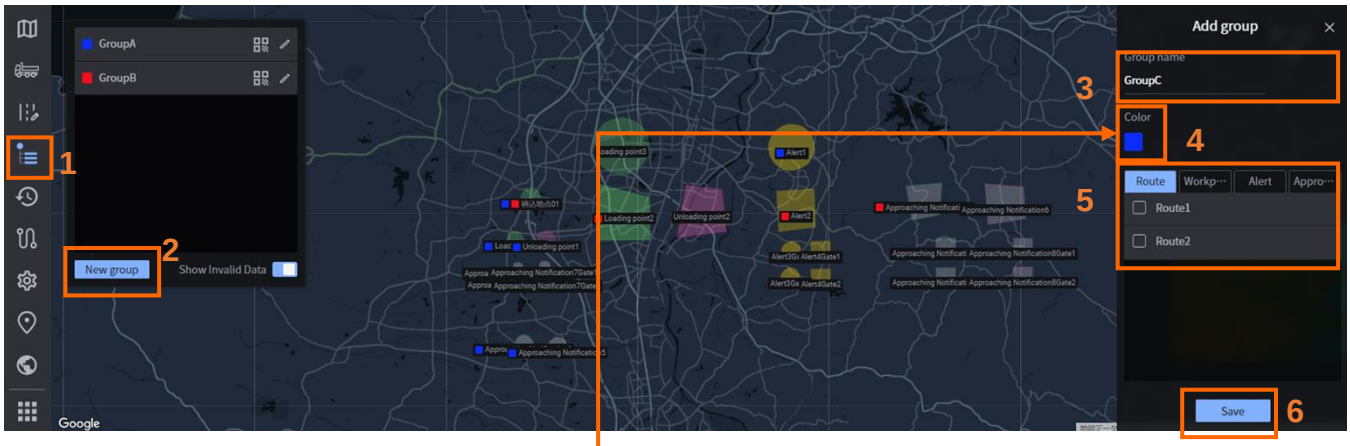


Select the group you want to belong to when logging in the mobile application.
* You can belong to all groups.

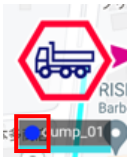
If the group information is not set, the group selection screen will be skipped during login.

■Create a new group

1. Display the settings Group menu
2. Click on ”Create new group”
3. Input group name
4. Setting Group color
5. Setting object (Route, working site, Alert, Approach notification) as Group
6. Click on ”Save”

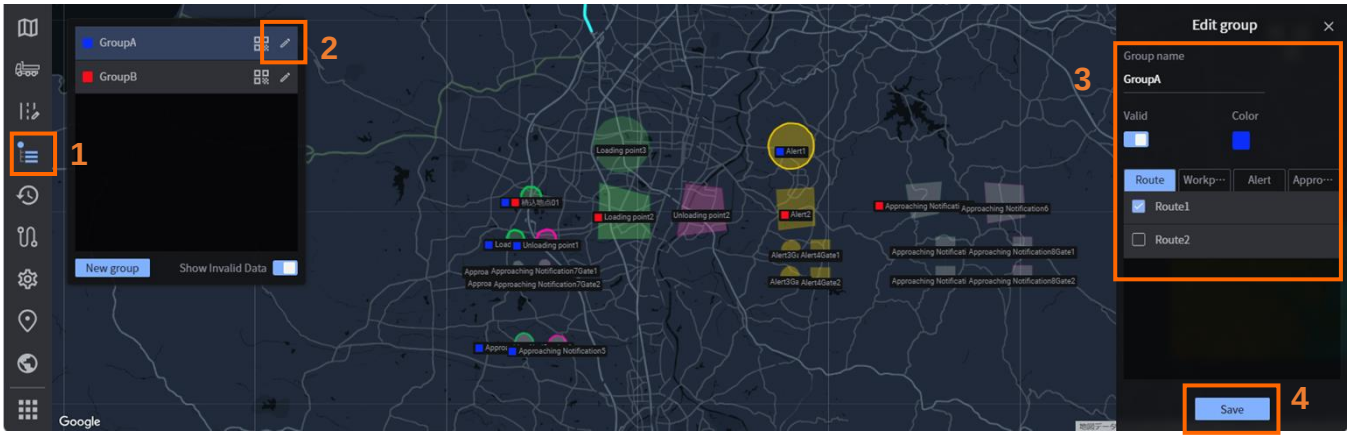


*The group color is reflected in the group icon color on the label of the vehicle icon in the mobile app



■Group editing

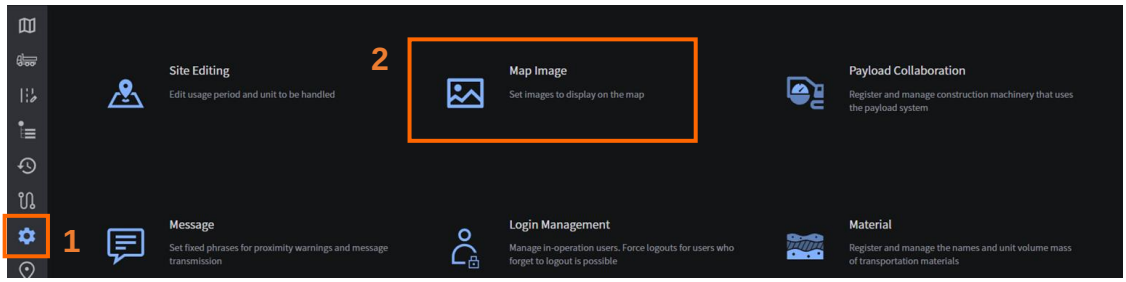
1. Display the setting Group menu
2. Click on icon edit of Group you want to edit
3. Edit setting informations form each group
4. Click on “Save”



[Optional] Attaching Image to Map

You can affix on the map an ortho image, design drawing, etc. taken during the construction.
The registered images are reflected on the map screen of “Real-time viewer”, “Map settings”, and “Group settings”.

1. Display the project setting screen.
2. Click the map image.



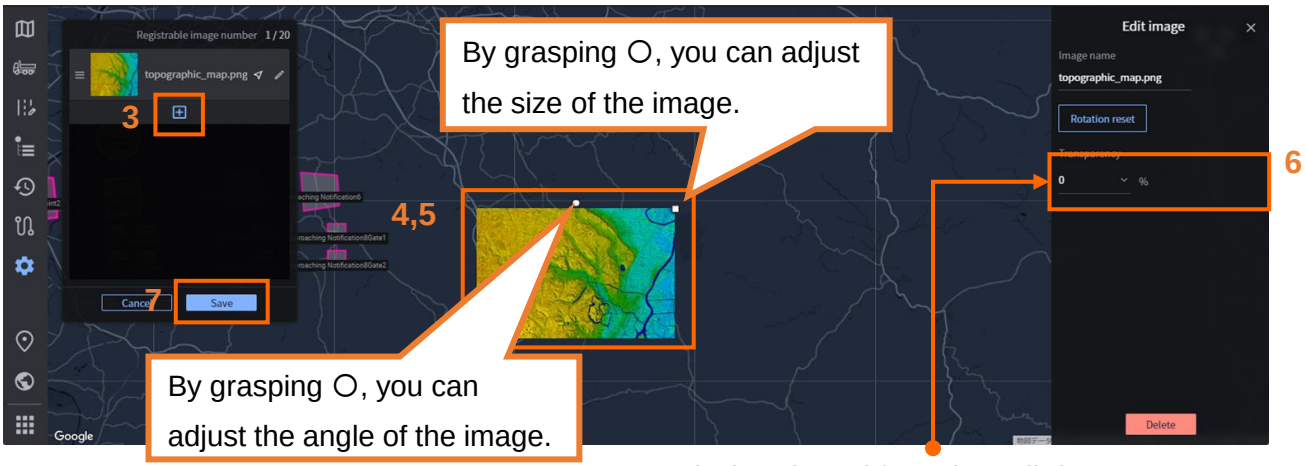
3. Click “+”.

* Upload the image you want to attach as the image upload window (Explorer) is displayed.

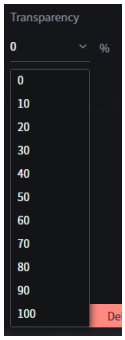
4. Uploaded image is added to the map.
5. You can move this to the desired position.

* With each handle, you can also resize the image and adjust its angle.

6. Select opacity level of the image.
7. Click “Save”.



* Opacity is selected from the pull-down menu.

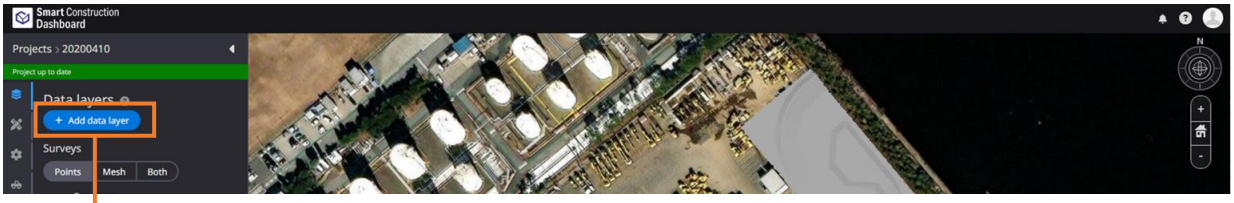


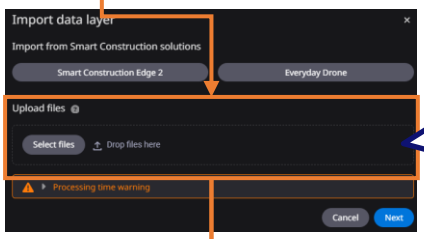
[Optional] Linking Ortho Images and Design Linework from Smart Construction Dashboard

1. Upload ortho images and design linework at Smart Construction Dashboard.
2. It is reflected on various map screens of Smart Construction Fleet.

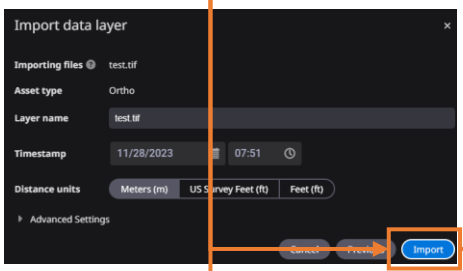
Note

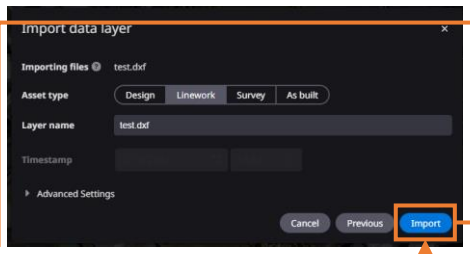
Note that it is not reflected if the site is not the same one created on the portal site.

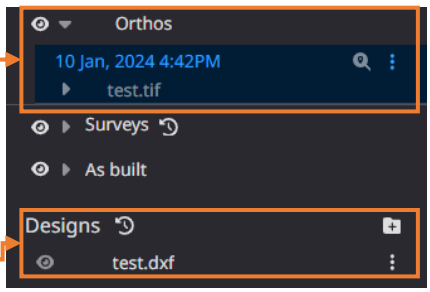


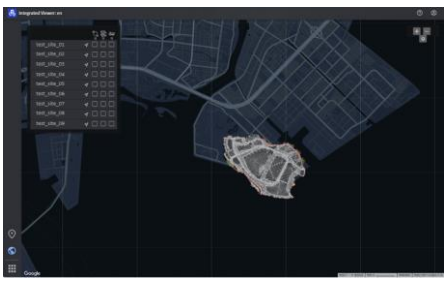


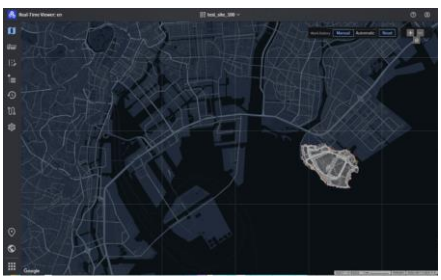
Upload ortho images and design linework.

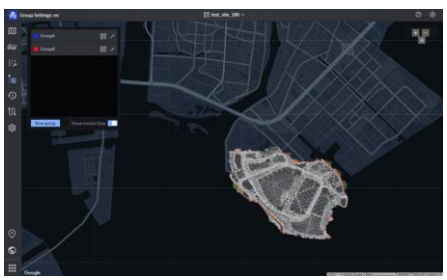


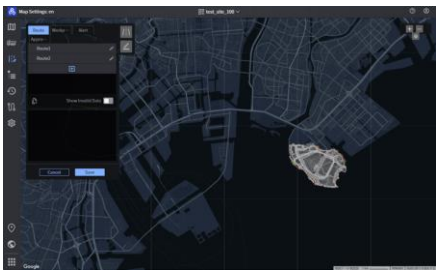












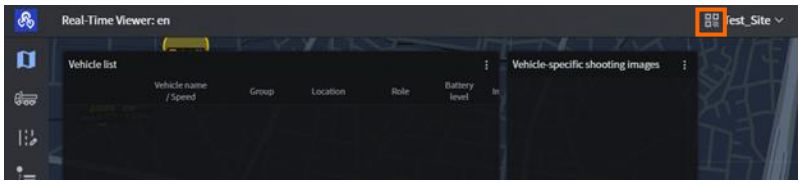
Prepare - Mobile app ver

Login

Operations on web management menu

■ Display 2D code

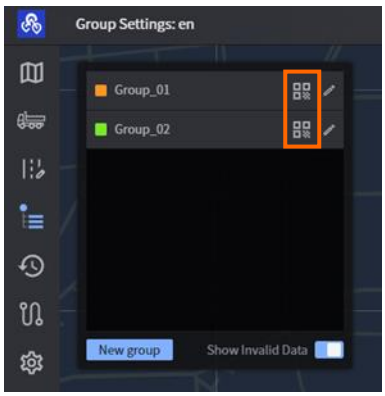
In case: from management tab



Click on button login code

In case: from transportation setting

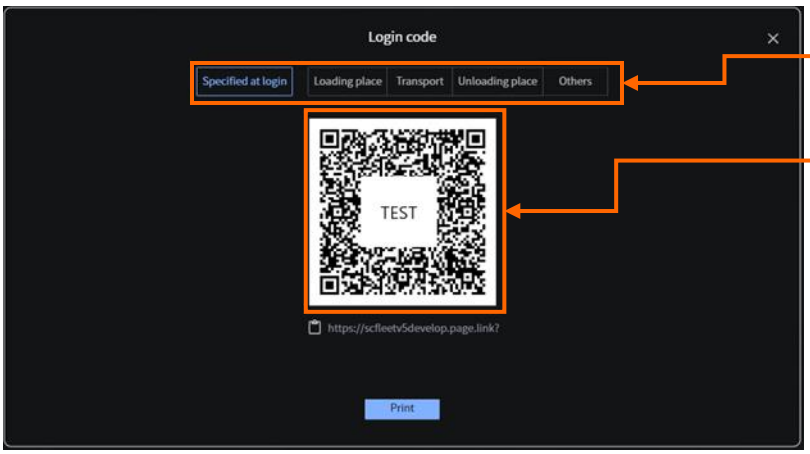
In case from setting Group



■ Informations are connected with application will be different depend on 2D code is displayed from every menu

- Tab on management menu → Construction site information
- Vehicle setting menu → Construction site, Vehicle information
- Group setting menu → Construction site,Group information

■ Can login app by prepare informations such as :
Construction site,Vehicle,Role,Group information
Missing information can be selected when login to app



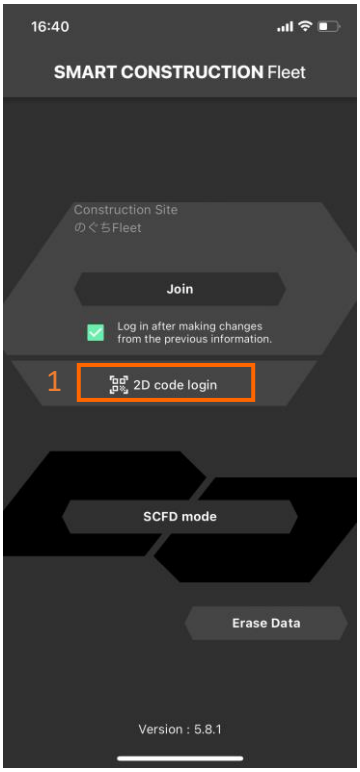
Role information
can setting form login code

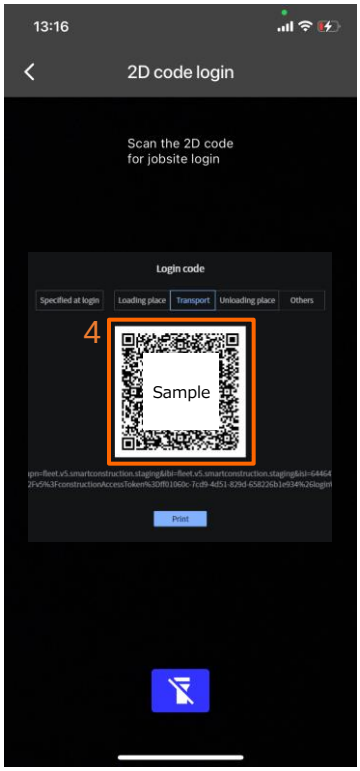
Display 2D code

Operations on mobile app

■ Read 2D code

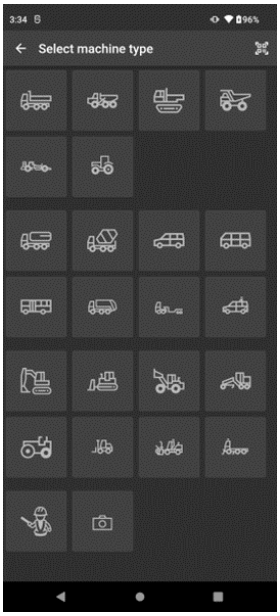
1. Tap on “2D code login”
2. Read 2D Code
   If the QR code is successfully read, it will transition to the next screen



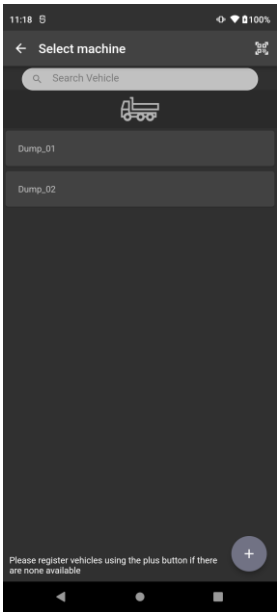


! To know detail about Role, please refer attach file "EN_SC Fleet_New ver_Role".
To know detail about Group, please refer attach file "EN_SC Fleet_New ver_Group".

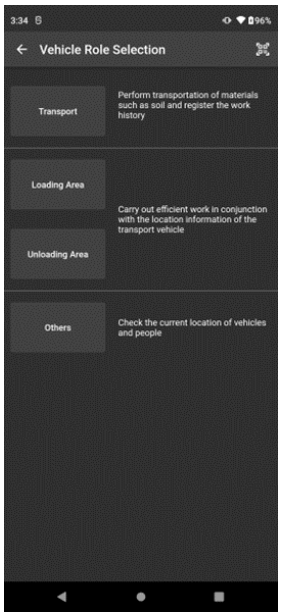
Select Vehicle type



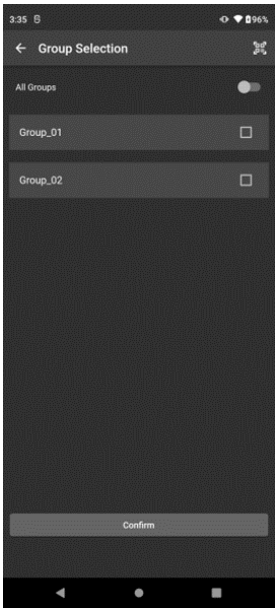
Select Vehicle



Select Vehicle role



Select Group



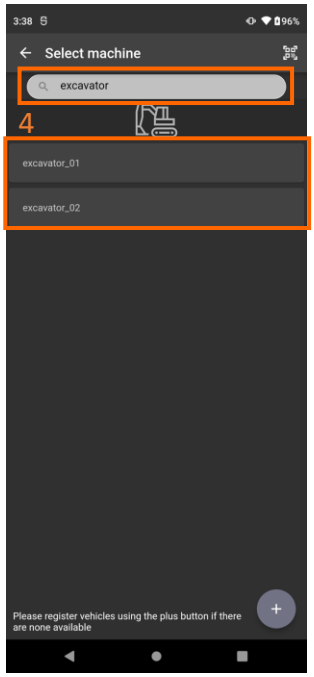
If the group information is not set on the web side, the group selection screen will be skipped.

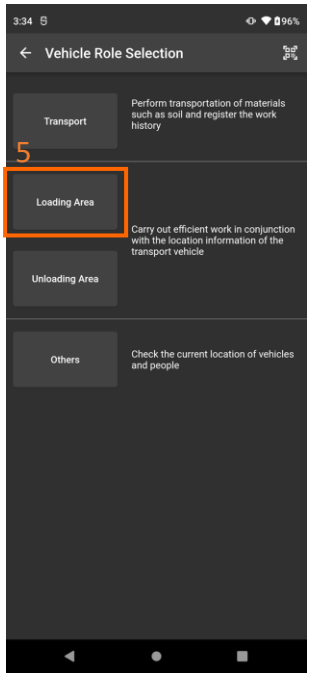
4. Input necessary informations as instruction,
after finish user can login and move to previous screen

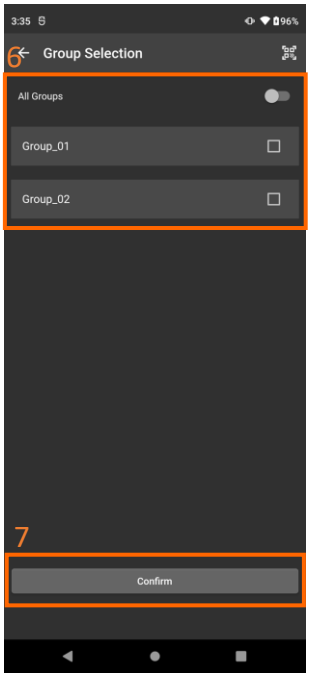
Example about login（Vehicle：Excavator , Vehicle role：loading area）

*Example using a QR code containing only construction site information

1. Tap on “2D code login”
2. Read 2D code
3. Tap on Excavator icon
4. Tap on Excavator to login
   You can search by inputting vehicle’s name
5. Tap on ”Loading area”
6. Select Group
   If the group information is not set on the web, the group selection screen will be skipped.
7. Tap on ” Confirm”



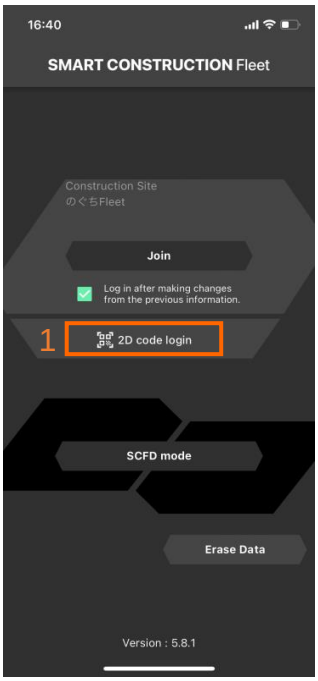


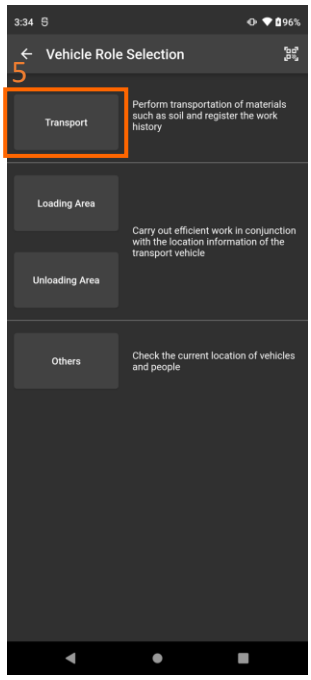


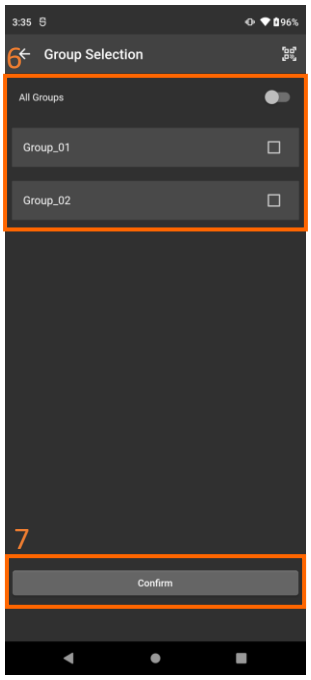
Example about login （Vehicle：dump、Vehicle role：transport）

*Example using a QR code containing only construction site information

1. Tap on “2D code login”
2. Read 2D code
3. Tap on Dump icon
4. Tap on Dump to login
   You can search by inputting vehicle’s name.
5. Tap on ”Transport”
6. Select Group
   If the group information is not set on the web, the group selection screen will be skipped.
7. Tap on ” Confirm”

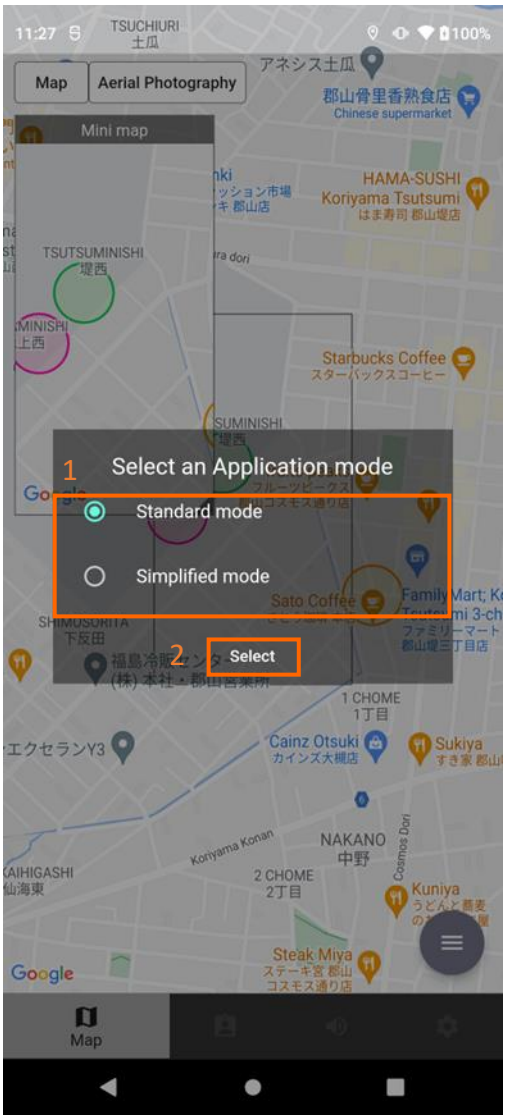






[Optional] Switch mode

1. Switch between standard mode and simple mode
   mode is selected initial is standard.
   Switch mode will nó display if login by 2D Code
   It will display if login by new 2D code
2. Start using with selected mode
   simple mode is limited some functions compare with standard mode
   User can switch mode after login so you should choose suitable mode

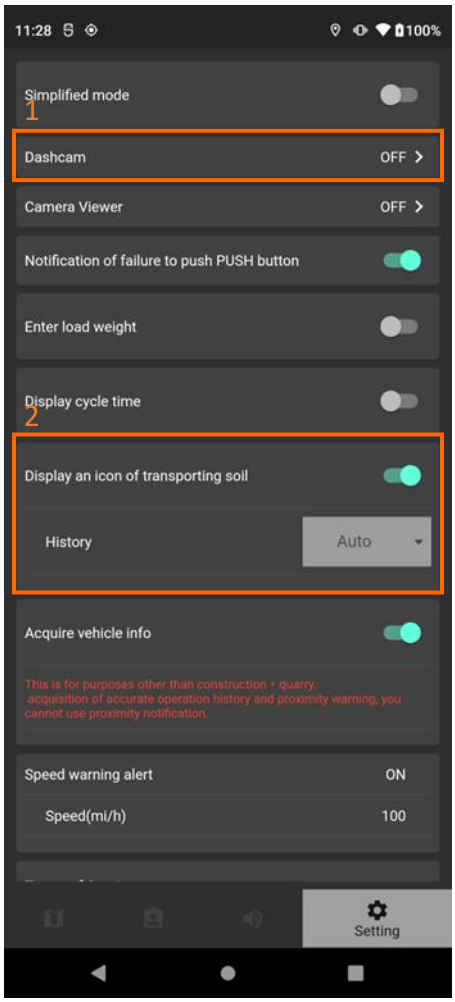


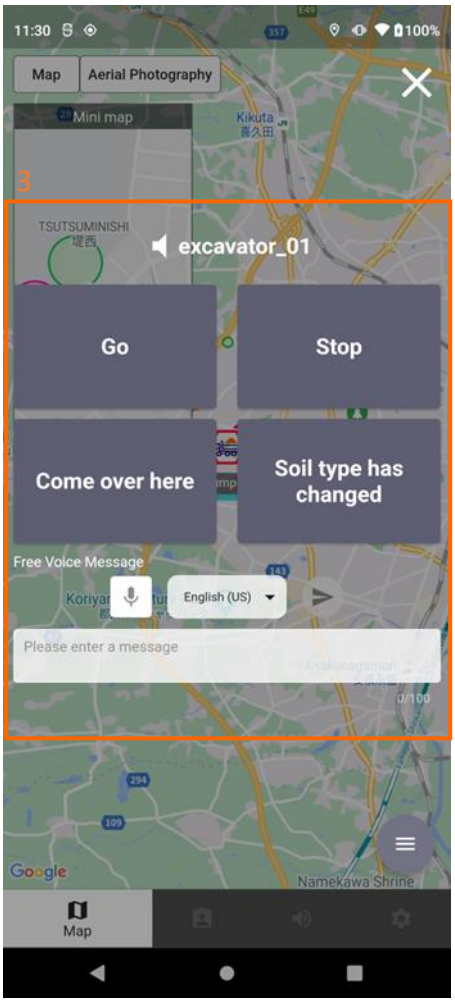
Standard mode

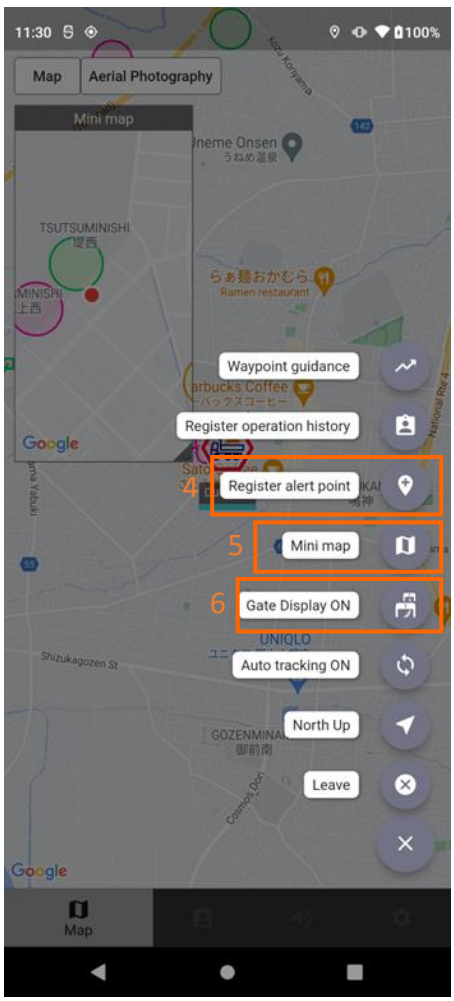
These functions have on standard mode only

■ All Vehicle role

1. Dashcam
2. Display an icon transporting soil
3. Sending voice message
4. Register alert point
5. Mini map
6. Gate Display ON/OFF

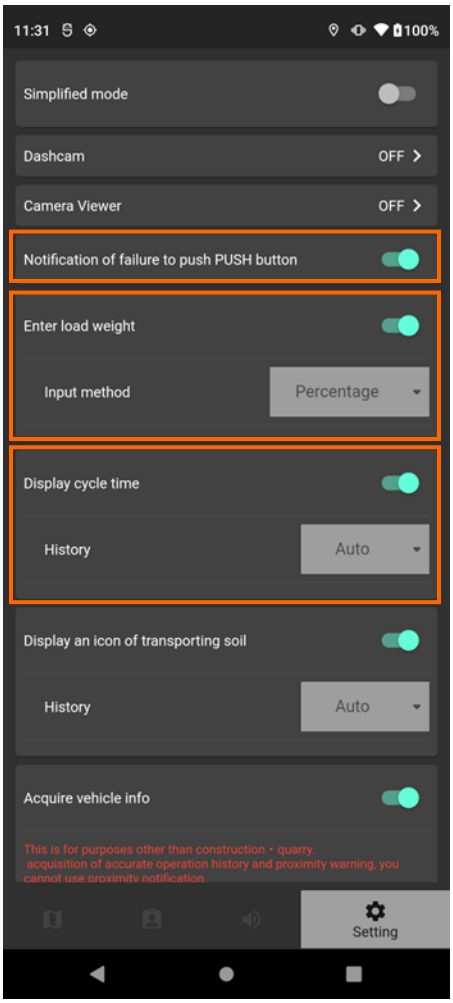


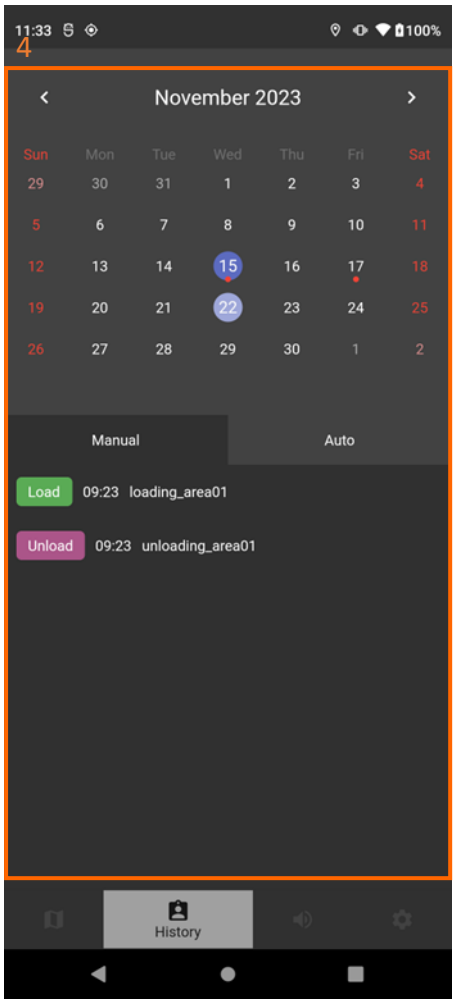




■ Vehicle role：transport

1. Notification in case forgot press PUSH button
2. Enter load weight
3. Display cycle time
4. Confirm working history
5. Register operation history
   （If you enter workplace, you can register working history by simple mode）





■ Vehicle role：Loading / Unloading

1. Approach notification
2. Change workplace
3. Change Material (Vehicle role：loading area)

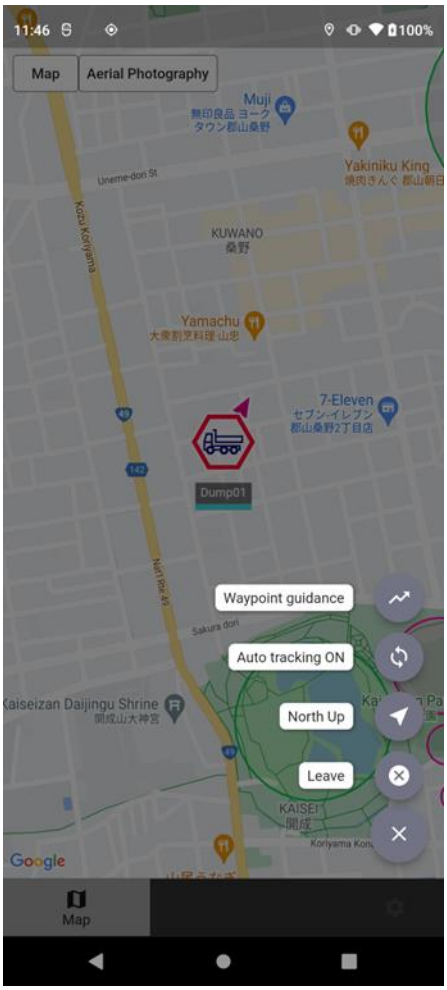
1

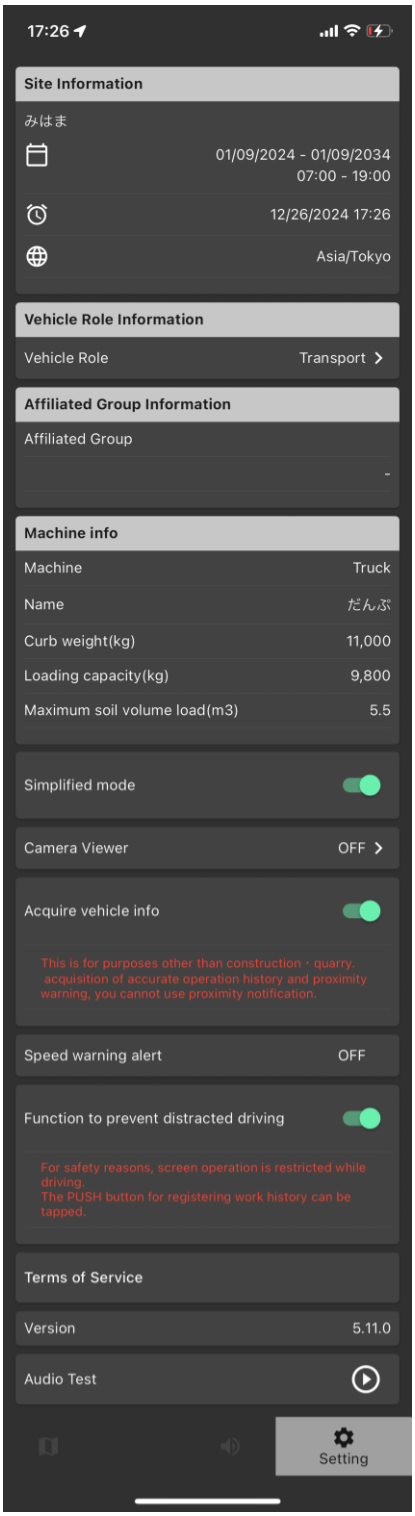
2

3

Simple mode

This is functions can using simple mode (vd: Vehicle role ; transport)





The functions are OFF at simple mode

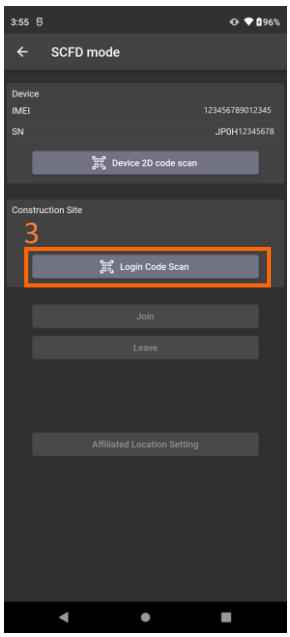
Spec at simple mode	
All Vehicle role	
Dashcam	Hide setting on setting menu
Display transporting soil	Hide icon , hide setting on setting menu
Send voice message	There is no reaction even if you tab to another vehicle icon
Register alert point	Hide button on map screen sub menu
Mini map	Hide button on map screen sub menu
Gate display ON/OFF	Hide button on map screen sub menu
Vehicle role：Transport	
Notification of failure to PUSH button	Hide setting on setting menu
Enter load weight	Hide setting on setting menu
Display circle time	Hide setting on setting menu
Confirm working history	Hide icon “ working history “
Register working history	Hide icon on sub menu map screen ※After enter workplace, user can register working history
Vehicle role： Loading / Unloading area	
Approaching notification	Hide Approach notification
Change workplace	No response when touching to the workplace
Change Material (Vehicle role : only loading area)	Hide button Change Material

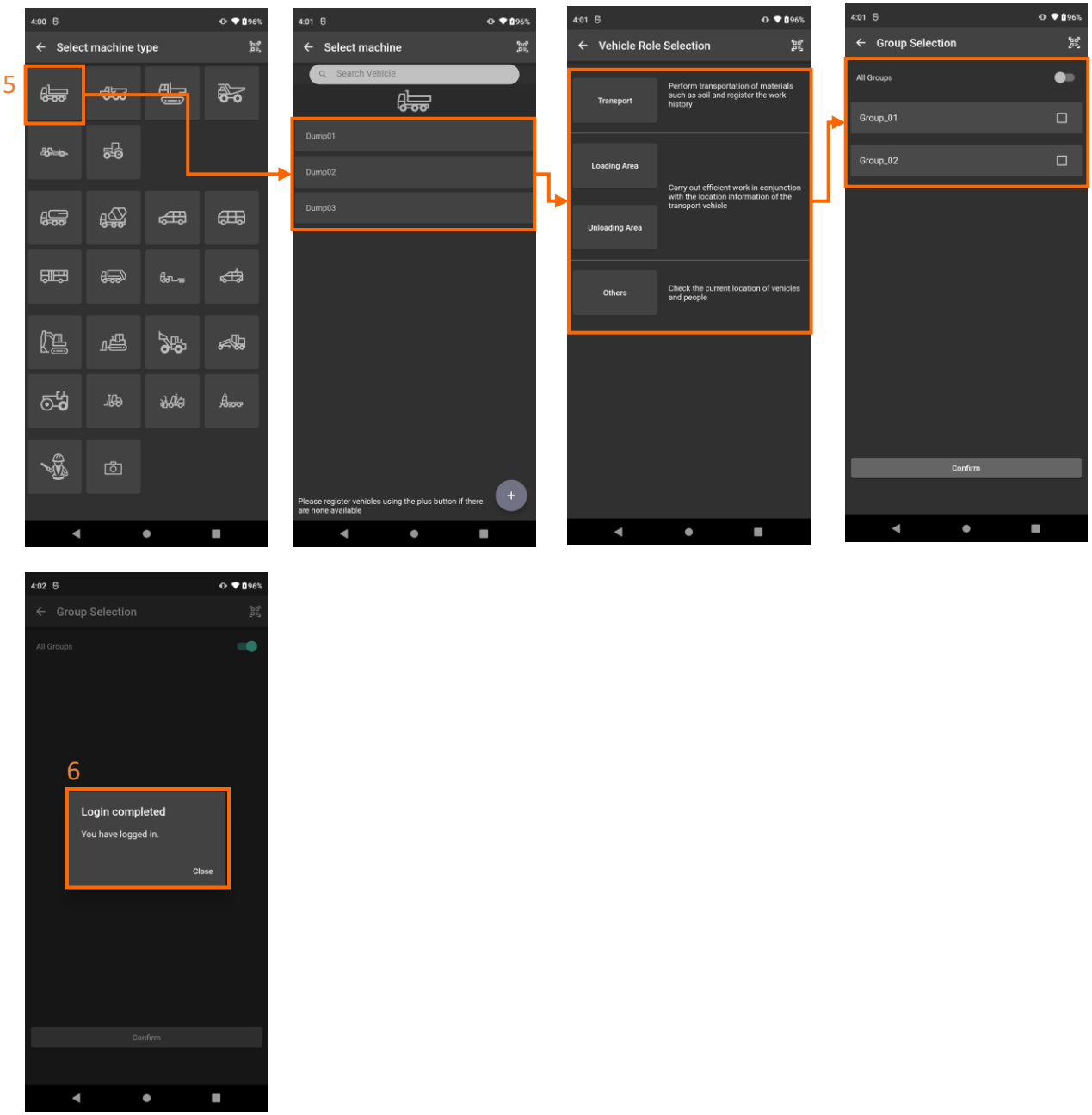
Login

1. Tap on “SCFD mode”
2. Read 2D code on the back of device
3. Tap on “Login code scan”
4. Read 2D code using for login
5. Select Vehicle type,Vehicle,Vehicle role,and Group
   （Refer “Operations on mobile app”）
6. Tap on “Close” at notification for login successful

Note

- If user login once, the next time they don’t need login again.
  Please logout if you finish all work at working site
- Setting workplace only use when login Vehicle role is “Loading area” or “Unloading area”



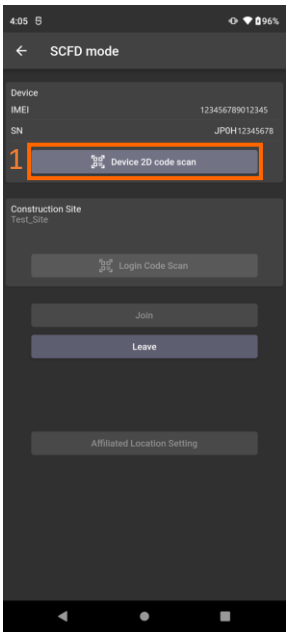


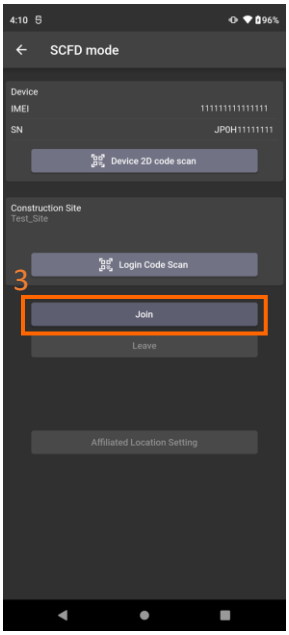
Note

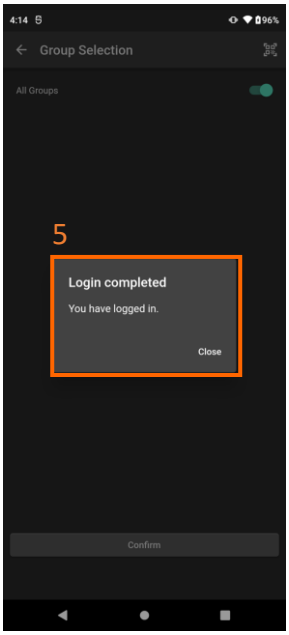
- If the group information is not set on the web side, the group selection screen will be skipped.
- “Login code scan” , Forwarding destination will be different depend on the information is save by 2D code.
  Detail is showed at “Prepare - Mobile app ver”.

In case login to multiple “SCFD” with same code

1. After login , tap on “Device 2D code scan”
2. Read 2D code at the back of device
3. Tap on “Login”
4. Select vehicle type, vehicle, vehicle role, Group（The same steps as login on mobile app）
5. Tap on “Close” At login successfully message

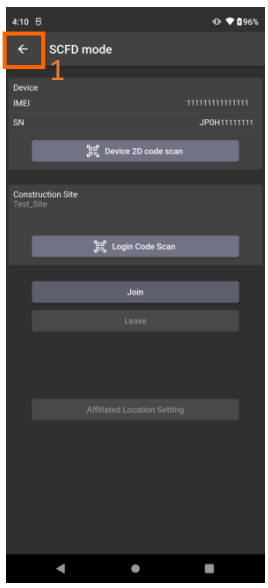






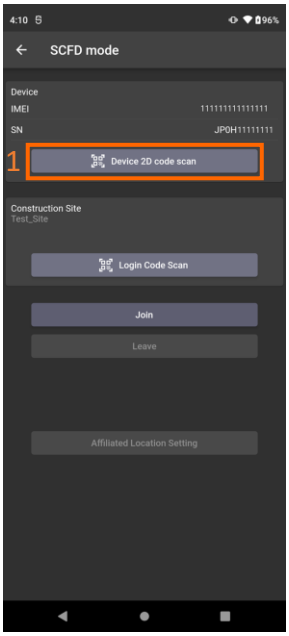
In case login to “SCFD” by different code

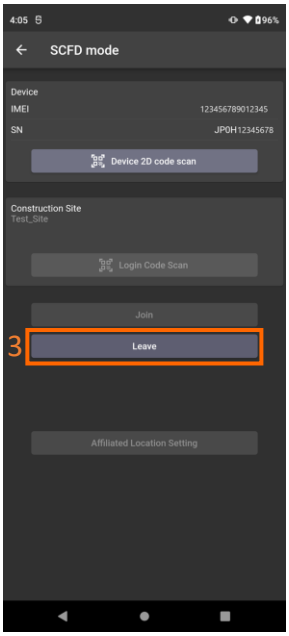
1. Tap on “←” to back to previous screen
2. Login by “SCFD” login process

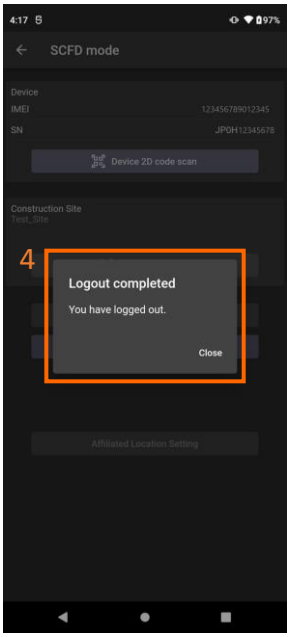


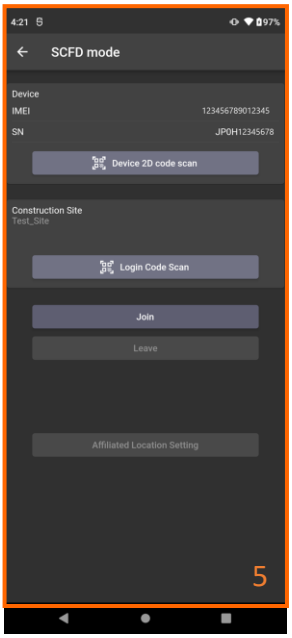
Logout

1. Tap on “Device 2D code scan”
2. Read 2D code of the same device read when login
3. Tap on “Logout”
4. Tap on “Close”at logout successfully notification
5. The screen after logout successfully









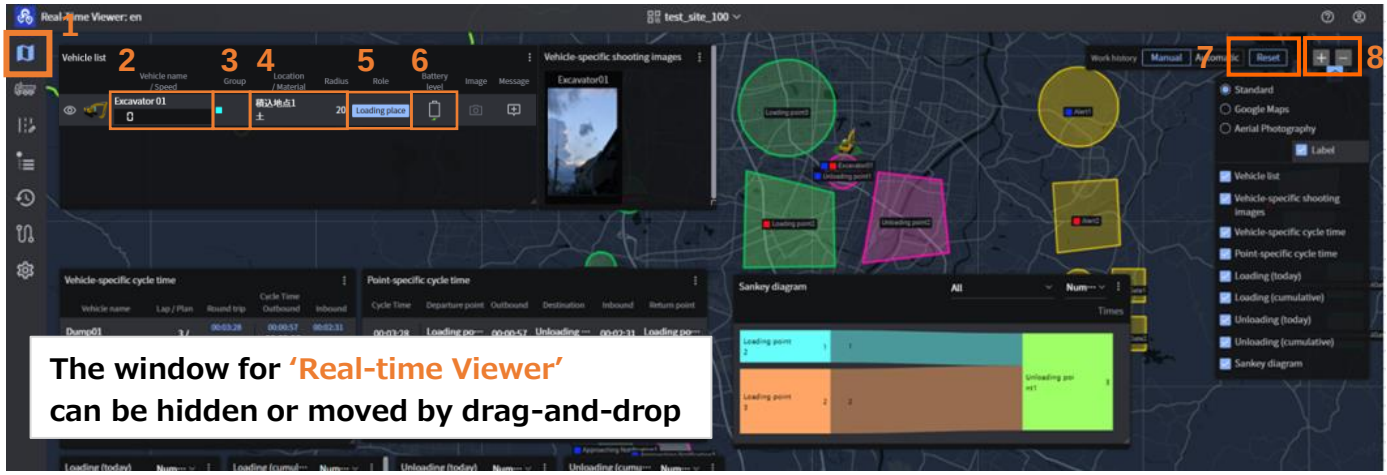
The different between “SCFD” mode and mobile app

Item	Device	Mobile app
Actions on setting menu		
Send message	×	○
Device or mobile app		
Confirm your vehicle’s location	×	○
Send and receipt message	×	○
Assign to Loading/Unloading Point	○	○
Automatically count Loading / Unloading	○	○
Manual count Loading / Unloading	×	○
Register working history at any site	×	○
View working history	×	○
Detection object approaching notification	○	○
Send approaching notification	×	○
Send Alert	×	○
Detection object proximity warning	○	○
Send proximity warning	×	○
Alert over speed	×	○
Create alert point	×	○
Dashcam	×	○
Jump position adjustment function	×	○
Route deviation warning	×	○

Check working status of a site

Display location, loading/ unloading area, alert, v.v. of construction machine and dump has device which is equipped mobile app by real time

1. Display Real-time viewer menu
2. Display the vehicle name and travel speed.
3. Display/Change Group that the vehicle belong to
4. Display/Change loading/unloading area that the vehicle belong to (vehicle role:loading/unloading area
5. Display/Change vehicle role
6. Display the device usage battery
7. Reset center screen, ratio and Widget status to initial status
8. Zoom in, zoom out the map
   You can also zoom in and out on the map using the mouse wheel.



To know detail about Role, please refer attach file "EN_SC Fleet_New ver_Role".
To know detail about Group, please refer attach file "EN_SC Fleet_New ver_Group".

Note

If device location information isn't sent in 10 minutes, vehicle and person icon will change to grey
【For example, when the location information is not sent in 10 minutes】

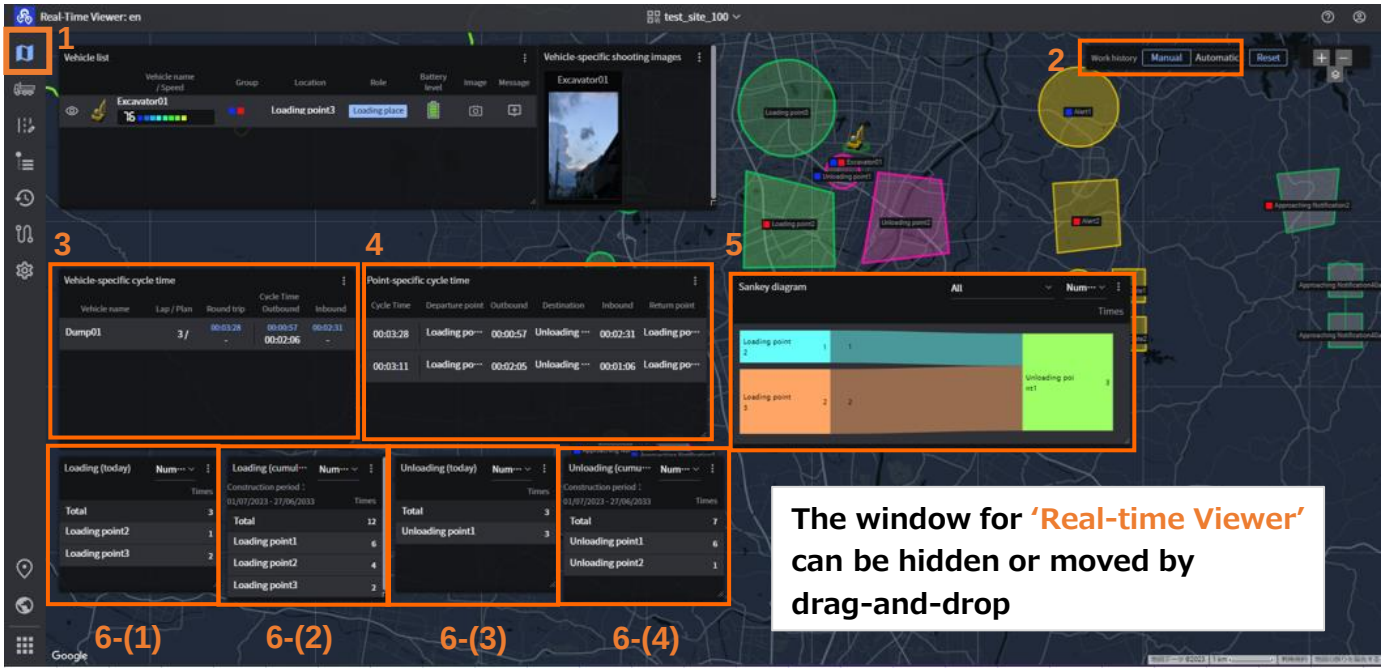
- Location information is not sent because it is out of working time of construction site
- The device is shut down in login status
- The device is powered off
- The internet connection is low
- The application is stop for any reason

※ The vehicle which stops for more than 24h will not display

Check loading/unloading progress

Checking by real-time viewer

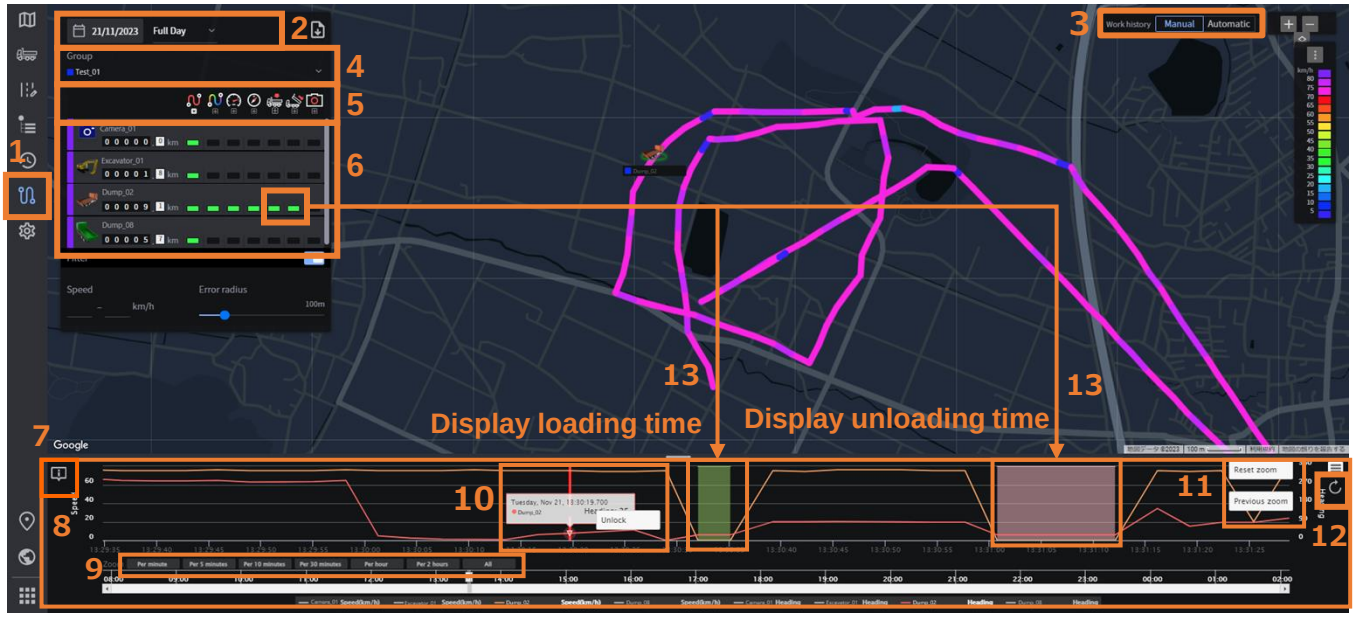
1. Display real-time viewer menu
2. Change display between the result which is automatically calculated and manually calculated
3. Display cycle time belongs to vehicle type
4. Display cycle time belongs to workplace
5. Display Sankey diagram can check real value of delivery source and real value of delivery destination
6. Display loading result by workplace
    - 6-(1) Display loading result by day
    - 6-(2) Display loading result accumulation
    - 6-(3) Display unloading result by day
    - 6-(4) Display unloading result accumulation



Check by travel history menu

1. Display travel history menu
2. Choose date you want to check travel history, can filter the result by time period
3. Change display between the result which is automatically calculated and manually calculated
4. Filter vehicle by select Group
5. Select multiple / unselect multiple "Trajectory", "Speed distribution", "Speed", “Heading", "Load", "Unload", “Captured image" from the left by clicking corresponding icon
6. Check for every login device
7. Display results were checked at item 4 and 5 on chart. Can zoom out by dragging

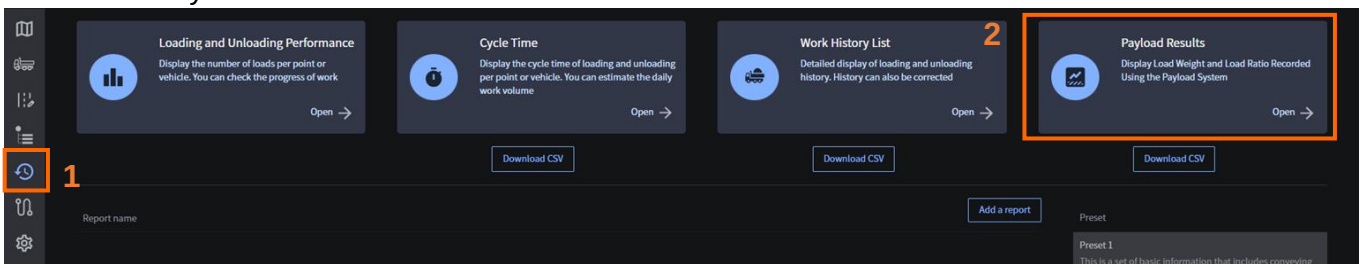
8. Show/Hide the chart note
9. Select time unit to show the chart
10. Fix the map display time by clicking on the chart
11. To zoomed out the chart already, user can still restore zoom level
    When click on Previous Zoom, user can back to previous zoom level
    When press Reset Zoom will reset all zoom level
12. If click on it, will reset all high and chart
13. If existing loading/unloading history of selected vehicle, these history will be overlapped into chart



Check payload result

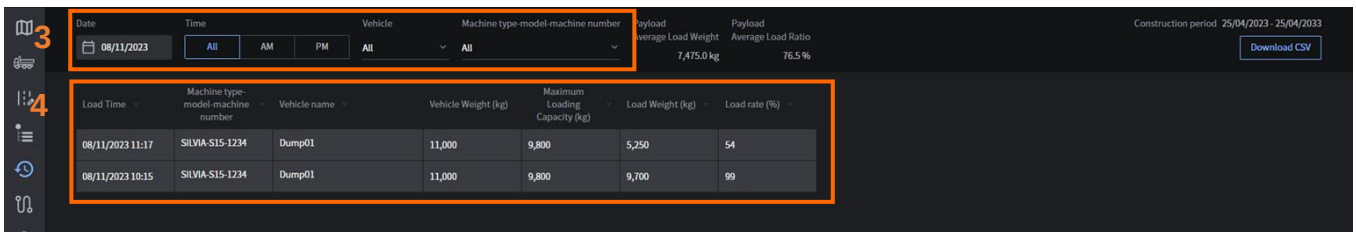
■ Display payload result

1. Display Performance menu
2. Click on Payload Results



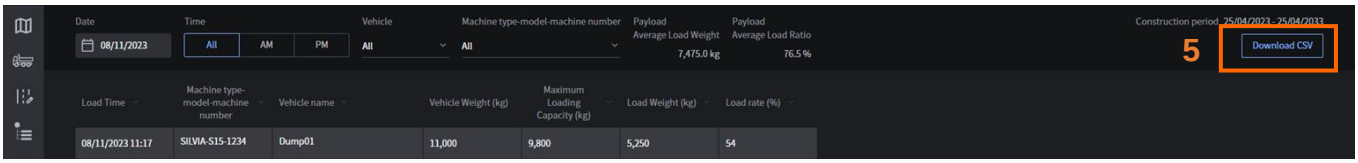
3. Select date time
Can filter the results by selecting “Load Time”, “Vehicle name”, “Vehicle type - model - machine number”

4. Display payload results of object



■ Saving for payload results

5. Click on download CSV to save CSV file



6. Display download CSV modal
7. Select period time to export file
   Date：require enter date
   All entries：not need to input data
8. Click on download

CSV file will have some informations: Loading day、Loading time、Loading time (milliseconds)、Time zone、Model-Type-Machine number、Vehicle name、Vehicle weight (kg)、Maximum load capacity (kg)、Loading weight (kg)、Loading rate (%)

File name when export by selecting ‘Date’： 「payload-{Construction site ID}-YYYYMMDD.csv」
File name when export by selecting ‘All Entries’： 「payload-{Construction site ID}.csv」

Loading day	Loading time	Loading time (milliseconds)	Time zone	Model-Type-Machine number	Vehicle name	Vehicle weight (kg)	Maximum load capacity (kg)	Loading weight (kg)	Loading rate (%)
2023/11/8	11:17:34	536	+09:00	SILVIA-S15-1234	Dump01	11000	9800	5250	54
2023/11/8	10:15:39	256	+09:00	SILVIA-S15-1234	Dump01	11000	9800	9700	99

Check the safety of the operation status

Display travel history of optional date for each used device

■ Map menu

1. Select “travel history”
2. Select a date you want to check the history
   Can filter the results by period time
3. Filter by selecting Group
4. Select all / Unselect all "Trajectory", "Speed Distribution", "Speed", “Heading", "Loading", "Unloading", “Captured Image" on the left by clicking on icon
5. Checking for each login device
6. Display vehicle identification color, icon which express vehicle azimuth and total run distance
   Can change color by clicking on vehicle identification color
7. Checking camera image that is captured by mobile app
8. Filter displayed content. If ON can filter by following conditions:
   - 8-(1) Can excluded the location information with low accuracy and display it.
     The smaller error radius, the more accurate the displayed location information is.
   - 8-(2) Only travel history within speed range is displayed on the chart
9. Reload the screen
10. Export travel history by CSV file
11. Display speed distribution
    Display drove color by Use Guide
    When click on ⋮ abover use guide,can edit the color of speed distribution.

■ **Graph section**

1.Display the checked result at section 4 and 5 of “Map menu”.
Can enlarge the map by drag

2. Display/Hide the charts note
3. Select time unit to display chart
4. Fix map display time by clicking on chart
5. Revert zoom level if it was enlarged before
   When clicking on Previous Zoom will revert to previous zoom level
   When clicking on Reset Zoom will revert to original zoom level
6. Click here to rerate the high ratio of the map and chart

■ **Save travel history**

Click on number 10 on “Map menu”.

CSV file has some informations: vehicle ID, vehicle name, maximum load (kg), start date, driving time (millisecond), time zone, latitude, longitude, error radius (km), speed (km/h), azimuth, remaining battery (%) and traveled distance (km)

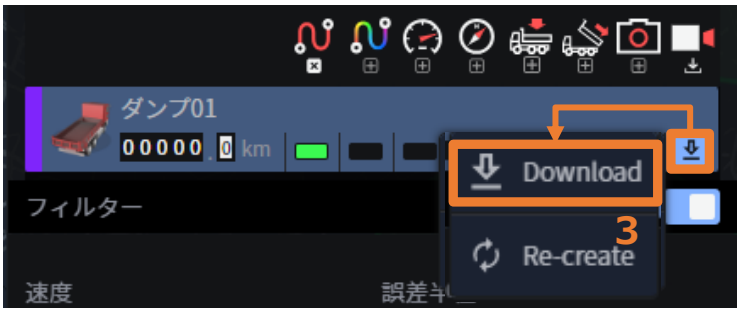
Vehicle ID	Vehicle name	Maximum payload (lb)	Travel date	Travel time	Travel time (milliseconds)	Timezone	Latitude	Longitude	Error radius (m)	Speed (mi/h)	Heading	Battery level (%)	Travel distance (km)
303	Dump_01	21605	2023/8/29	9:03:40	115	+09:00	37.39574	140.33	65.617	0	184.1	100	0
303	Dump_01	21605	2023/8/29	9:03:43	527	+09:00	37.39578	140.3299	65.617	1	213.469	100	0.003
303	Dump_01	21605	2023/8/29	9:03:47	665	+09:00	37.39574	140.33		0	183.619	100	0.006

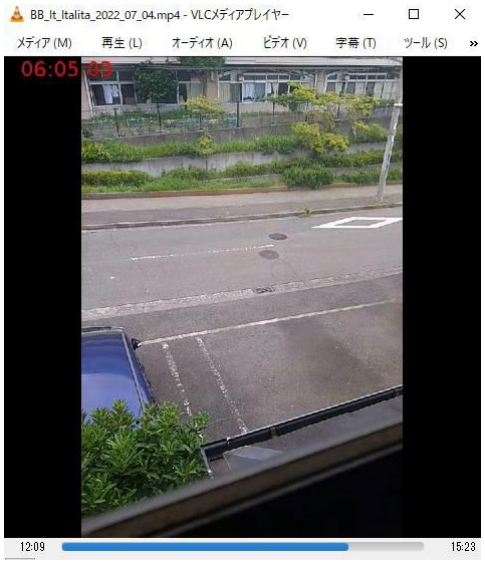
Output folder name： 「drivereport-{Construction site ID}-YYYYMMDD.zip」
Output file name： 「drivereport-{Construction site ID}-YYYYMMDD-{vehicle ID}.csv」

Check image is captured by mobile app

If using mobile app, let’s turning ON drive recorder from setting menu of mobile app
Can checking the image is captured by device’s camera

1.The image is capture by checked device’s camera will display by icon





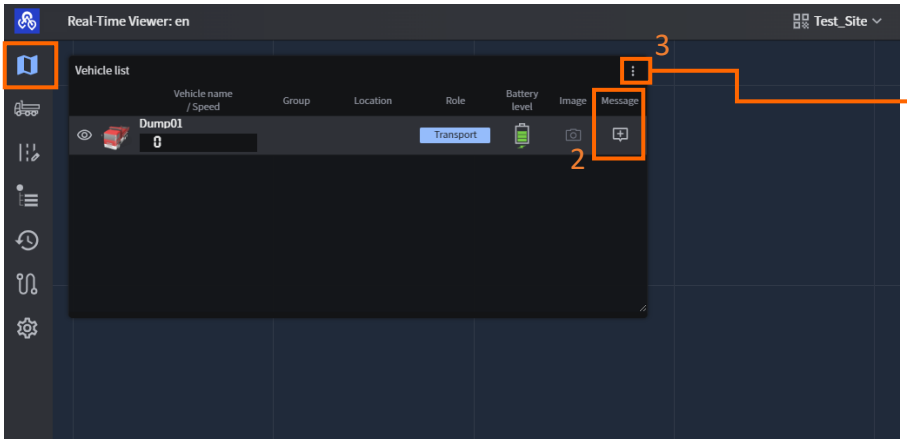
2. On the vehicle list of the driving history, you can create a video file. While the file is being created, the icon will change( ).
3. Once the creation is complete, you can output the video file by pressing the "Download" button.

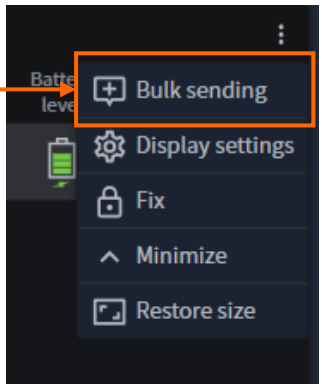
Check location of your vehicle and the others

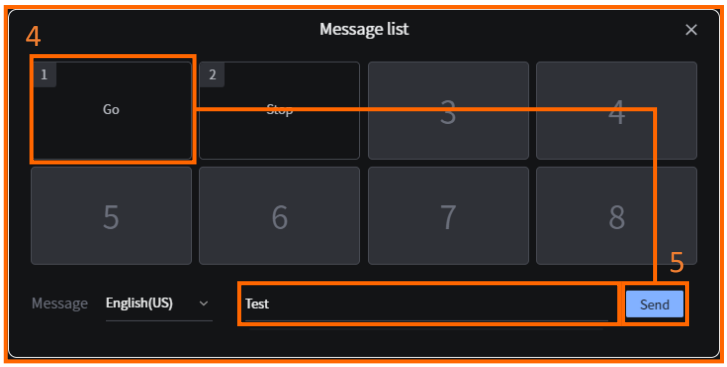
Can send voice message for employers who login mobile app

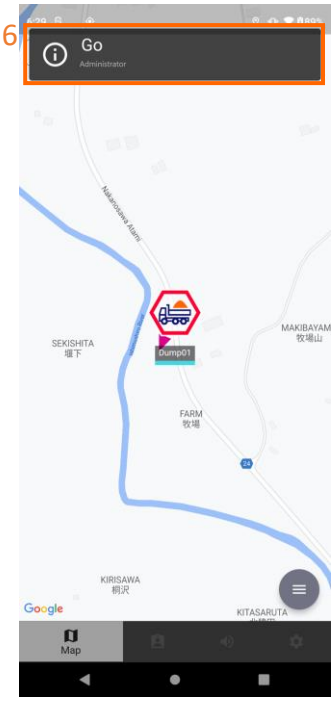
1. Select ”Real-time viewer”
2. Click on employer icon who you want to send private message
3. If you want to send in bulk, let’s click on icon ⋮ above vehicle’s list
4. Tap “2” or “3 “ to display the list of messages able to send
5. Click on message then tap “Bulk sending”
   History of the entered text is saved on each browser
6. Message is sent to worker’s mobile app.

Message is displayed on screen and automatically read aloud.









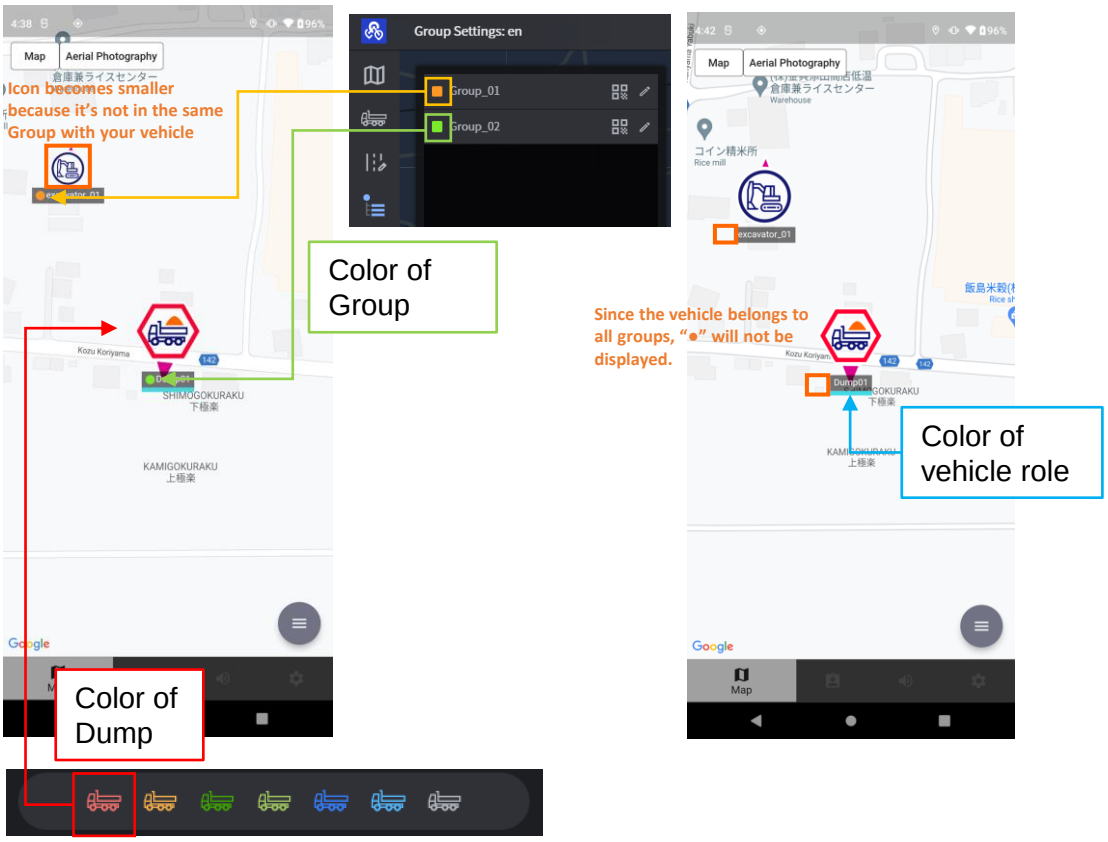
Check location of your vehicle and the others

Can check location information of employees and logging-in vehicles by using Smart Construction Fleet Device or mobile app.

Icon of your vehicle is displayed in hexagonal frame and
icon of other vehicle is displayed in circular frame.
If user select vehicle type to be "Dump" and then login:
Color of icon frame will correspond to the color specified when registering vehicle on the management menu.
Can check vehicle role of your vehicle by the color displayed under vehicle's name.
Transport: **Light blue**, Loading place: **Green**, Unloading place: **Pink**, Others: **Grey**
If the vehicle belongs to specific Group,
color of that Group will be reflected in "●" before the vehicle's name that is right under the icon.
If the vehicle belongs to every Group, "●" won't be displayed.

The other vehicle that belong to different Groups than your vehicle will have smaller icon.

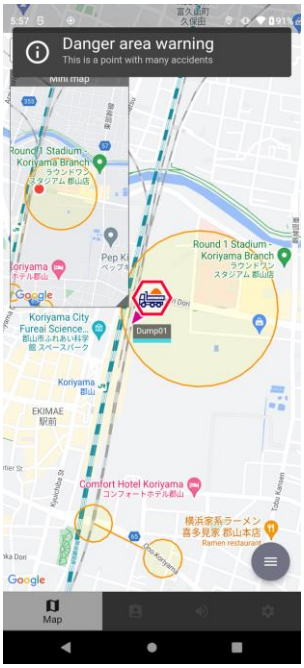
! To know detail about Role, please refer attach file "EN_SC Fleet_New ver_Role".
To know detail about Group, please refer attach file "EN_SC Fleet_New ver_Group".



Receive warnings about dangerous points on transport routes

User can receive warnings by voice messages in real time when entering the alert points which were previously set in the management menu.
Alert points can belong to Group.
Display Alert points on mobile app just in case they belongs to every Group or belong to the same Group as vehicles having Login mobile app.

To know detail about Group, please refer attach file "EN_SC Fleet_New ver_Group".



If alert points and your vehicle do not belong to the same Group, even when you enter those Alert points, you will not receive any warnings and Alert points will not be displayed.

Note

- If there is no voice, please check “Silent mode” settings of your device.
- If you can’t receive any warnings, please check if “Notification” mode of 「Smart Construction Fleet」 app is enabled or not in your device’s settings

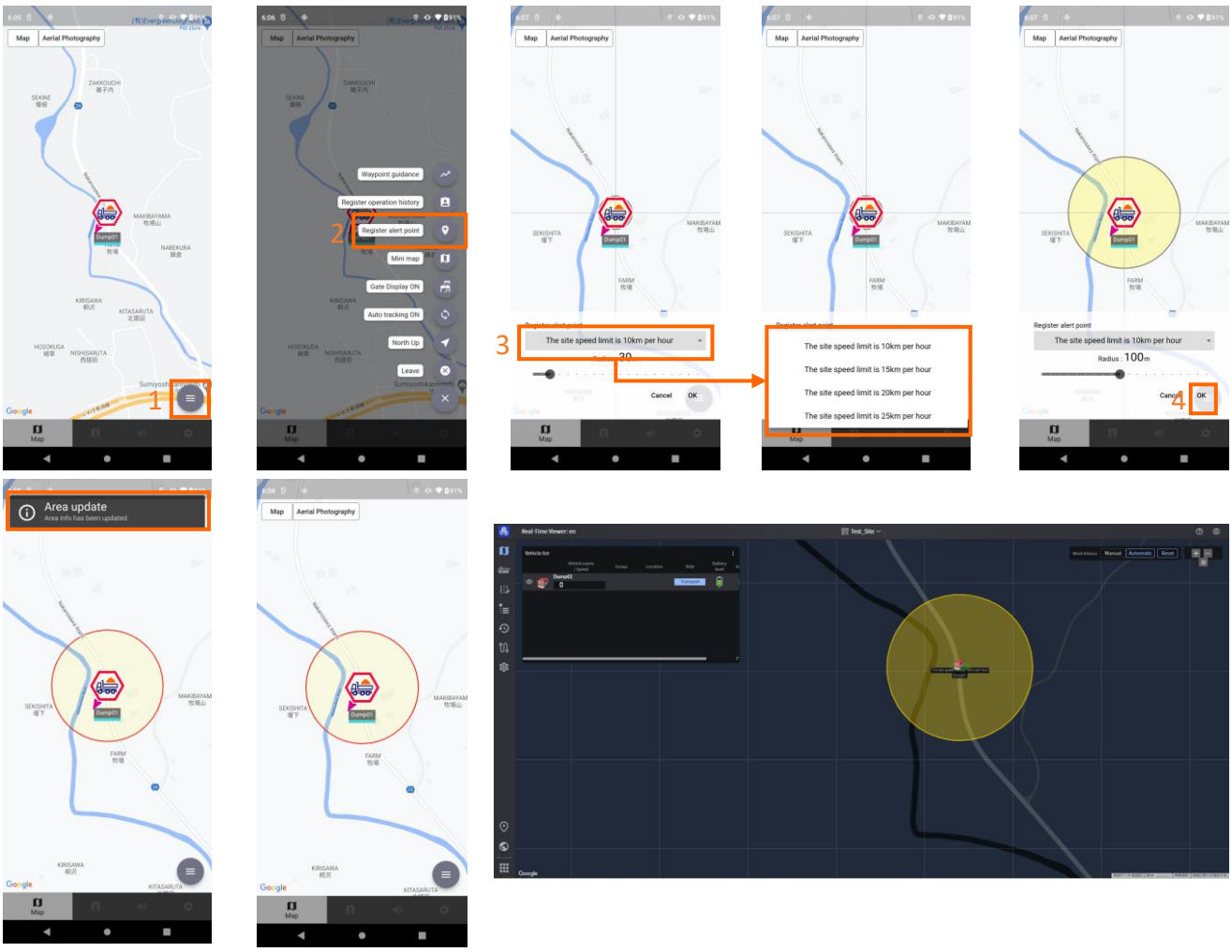
Share dangerous points on transport routes with others

When using the mobile app, you can create alert points to warn others when you are in danger on the transport route.
Alert points which are registered in mobile app is registered on web management menu also.

1. Tap the menu icon at the bottom right of the screen
2. Tap “ Register alert point”
3. Select standard text from pulldown.
4. Change the radius of the alert point if necessary and press “OK”
5. Complete registration
   Notification sound will be played on all devices logged in the mobile app
   "Area information has been updated" will be displayed.

Additional explanation

Can delete alert point by tapping it from the vehicle that registered that alert point.



Record Loading/Unloading history

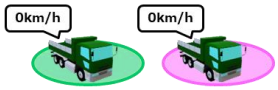
Record the history (Loading/ Unloading) by mobile app or Smart Construction Fleet Device.

Can record history only when logging in with the vehicle role which is Transport.

● Automatically count
By entering and exiting the loading/unloading workplace while logged in to the mobile app or SCFD, work history is recorded.
● Manually count
By entering the loading/unloading workplace while logged in to the mobile app and pressing the PUSH button, work history is recorded. Additional details will be explained on the next page.

Manually count

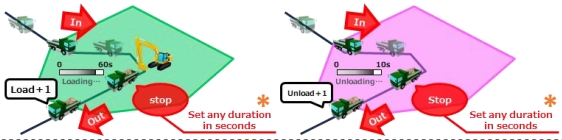
① **Vehicle(Vehicle Role:Transport) stops inside workplace**
② **Pressing the "PUSH" button on mobile app**
→"+1" count



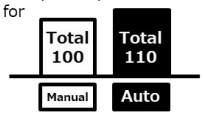
When entering workplace, the PUSH button appears with each stop until pressed.

Automatically count

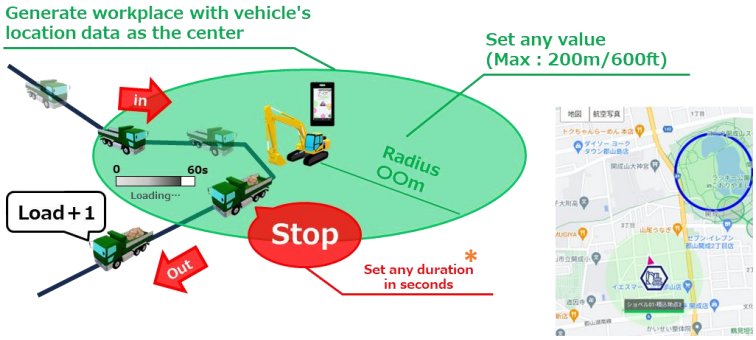
① **Vehicle(Vehicle Role:Transport) enters into workplace**
② **Vehicle stops inside workplace for fixed number of seconds.***
If it is a work point with settings for "Count at passing" stopping is not required.
③ **Vehicle exits the workplace**
→"+1" count



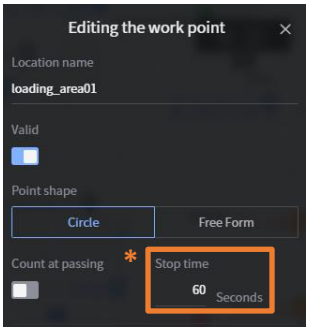
Results of Manuallycount and Automatically count are accumulated separately.
They can be toggled for display using the buttons below.



It is also possible to generate workplace around the Vehicle(Vehicle Role:Loading place/Unloading place)



Workplace can belong to a group.
The workplace is displayed in the mobile app and the work history can be registered only if you belong to all groups、Or, it will only be if you belong to the same group as the logged-in vehicle in the mobile app.



! To know detail about Role, please refer attach file "EN_SC Fleet_New ver_Role".
To know detail about Group, please refer attach file "EN_SC Fleet_New ver_Group".

Contact

- **For inquiry on products/ Contact at the time of malfunction**
  EARTHBRAIN Ltd.
  The URL below brings you to the inquiry site.
  https://www.earthbrain.com/contact/form/

Revision History

Creation/Revision Date	Revision Details
2024/02/02	Initial Version(Ver5.0)
2024/08/08	To simplify the login process, the changes have been implemented.
2025/01/07	Add a note stating that it is possible to change the role of vehicles in the Real-Time Viewer.