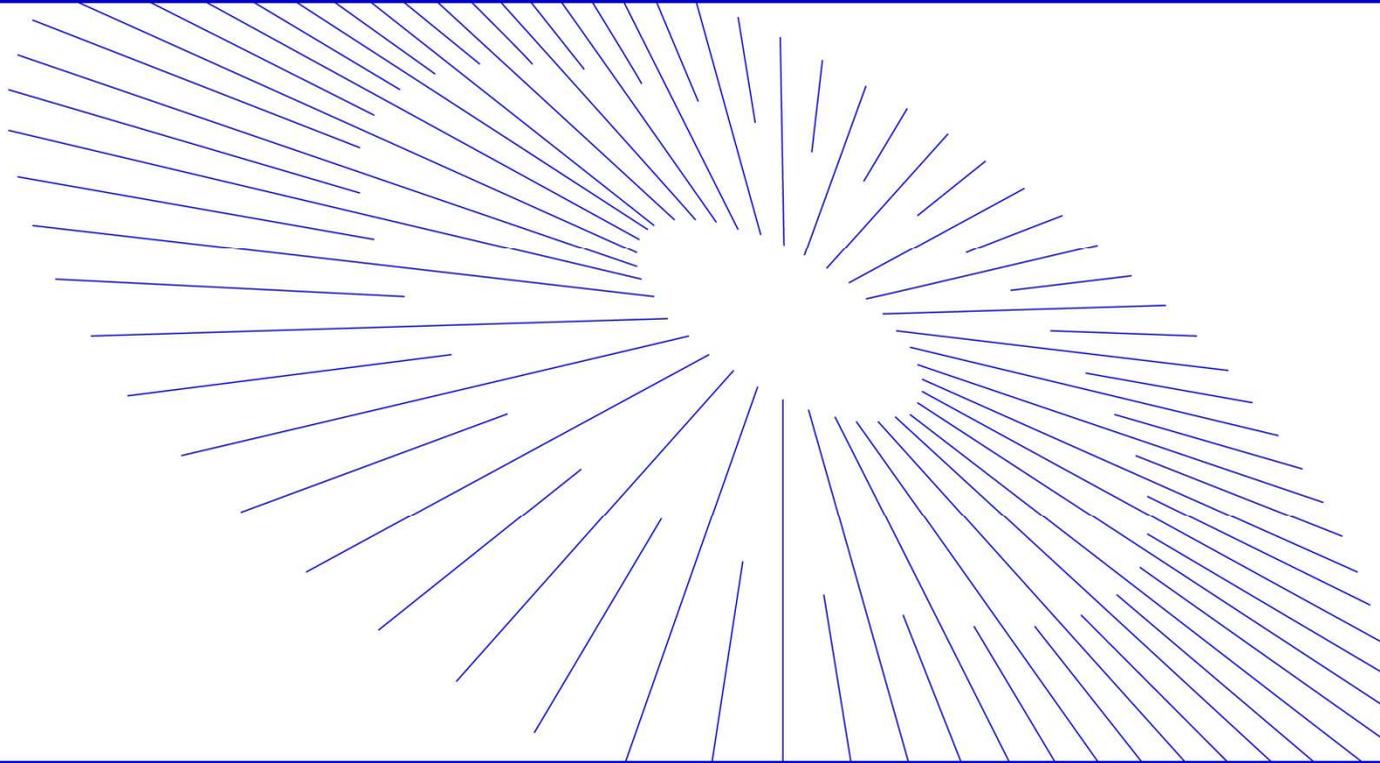


# Edge2 V9.1 Release Note

2025/05/20





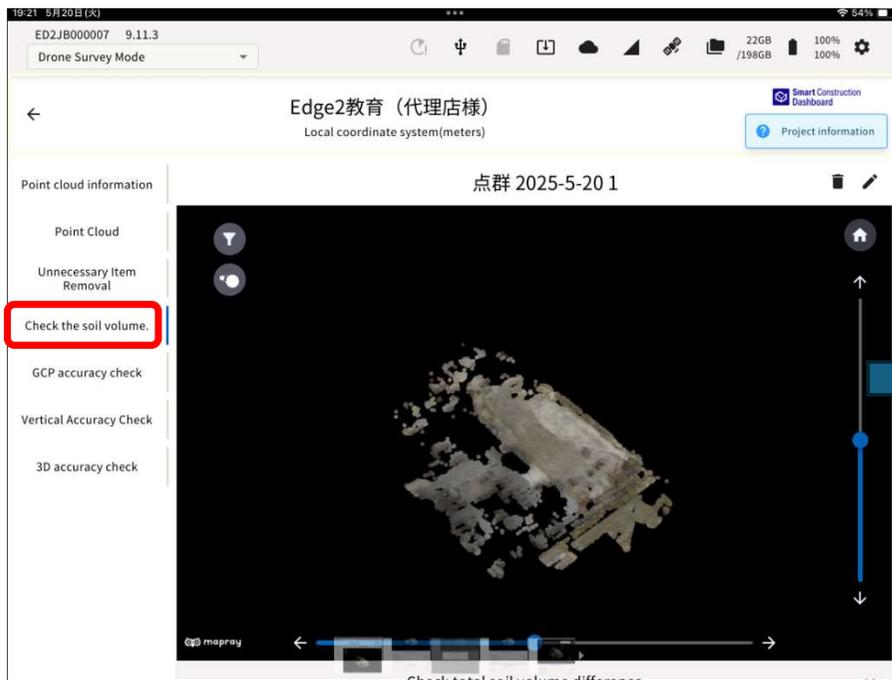
# EARTH BRAIN **Edge2 v9.1 Update item** ( Scheduled to be released on **June. 11** )

Application	Development items	Contents/Use case	UI Image
New feature /Performance Improvement	Calculate cut and fill volumes from generated point clouds	Automatically calculate volume differences by extracting changes between the previous and current point clouds. This feature addresses requests to monitor earth volume even on the Edge tablet for simple progress management.	P3~5
	DJI Matrice 4E Support	Added SFM processing support for the new DJI Matrice 4E model.	None
	Removal of Wi-Fi dongle usage restrictions	Lifted usage restrictions on Wi-Fi dongles by supporting faster devices like <b>Archer T2U Nano</b> , and added support for base station communication.	P6~8
	Retry upon error during base station communication	Improved to notify users in case of RTK correction data transmission interruption.	P9
	Reflect projects created in Edge2 on the Dashboard	Added the ability to inherit projects to the Dashboard when they are first created in Edge2.	P10

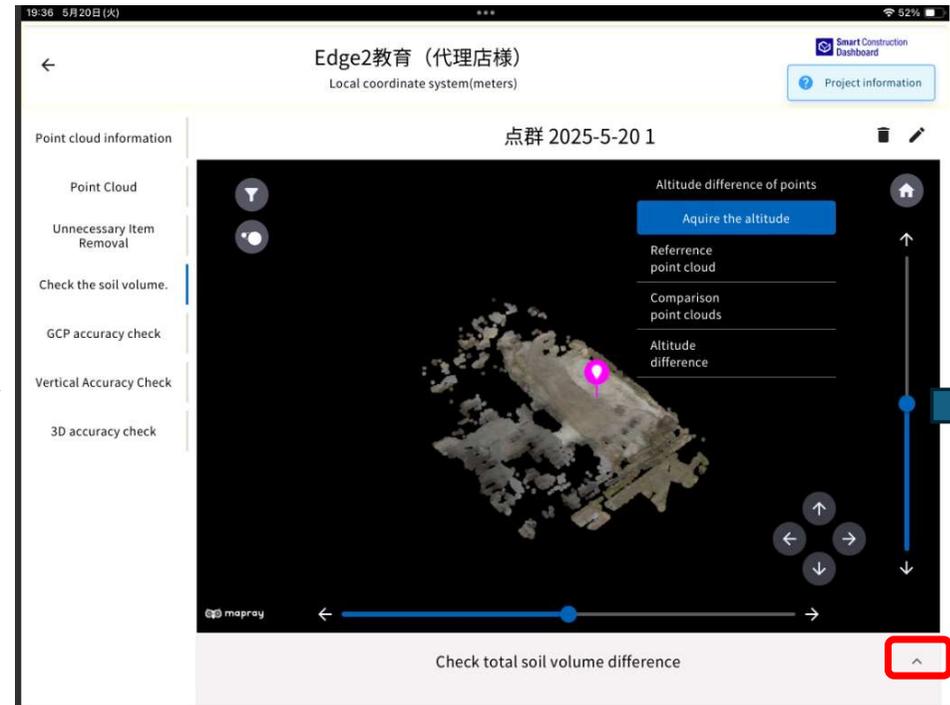




- Added a function to calculate cut and fill volumes from generated point clouds Added operations related to volume calculation to the point cloud display screen (e.g., a "Volume Check" button)The volume calculation computes the total excavation (cut volume), embankment (fill volume), and their difference, and displays the result in the Edge2 app The volume difference at tapped locations on the point cloud is also calculated separately and displayed in the Edge2 app



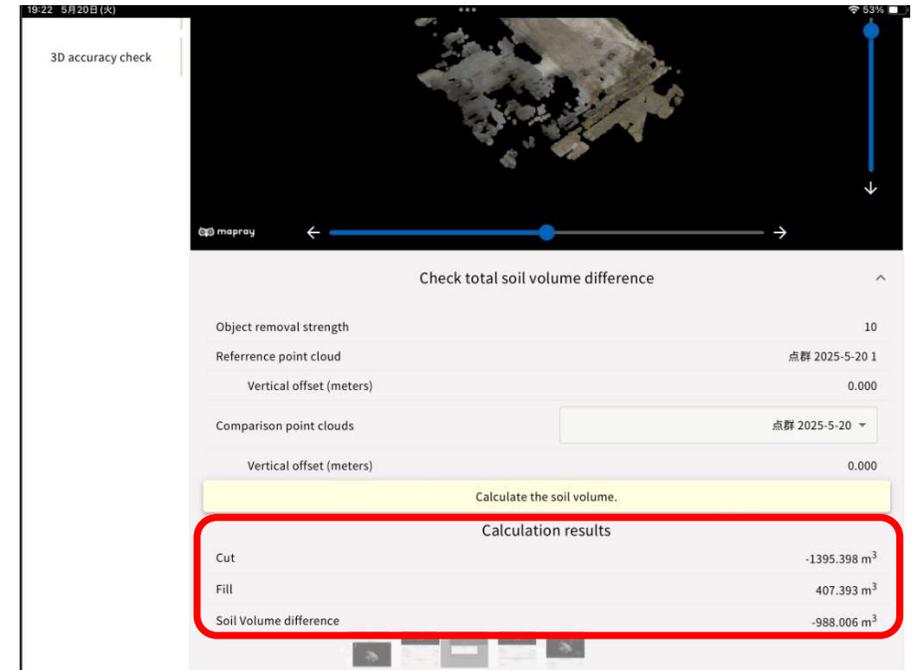
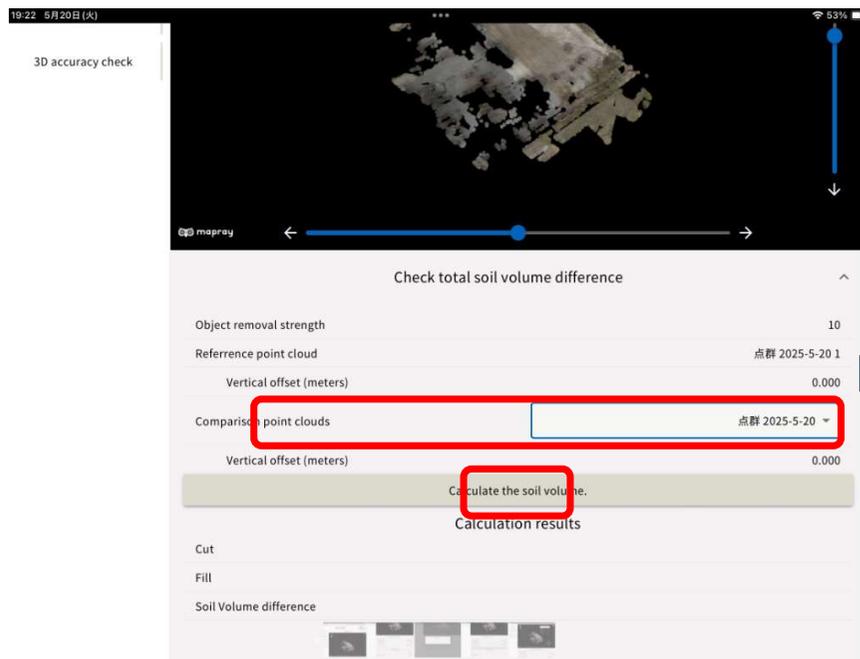
Tap "Check the soil volume"



Open the accordion and scroll the screen



- Added a function to calculate cut and fill volumes from generated point clouds. Added operations related to volume calculation to the point cloud display screen (e.g., a "Volume Check" button). The volume calculation computes the total excavation (cut volume), embankment (fill volume), and their difference, and displays the result in the Edge2 app. The volume difference at tapped locations on the point cloud is also calculated separately and displayed in the Edge2 app.

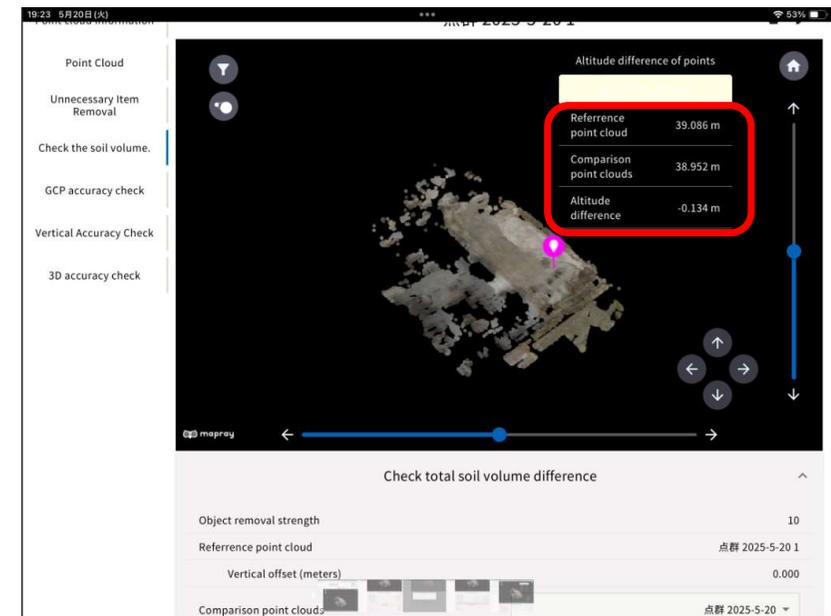


Select the point cloud for comparison and press "Calculate the soil Volume".

The results are displayed.



- **Added a function to calculate cut and fill volumes from generated point clouds** Added operations related to volume calculation to the point cloud display screen (e.g., a "Volume Check" button) The volume calculation computes the total excavation (cut volume), embankment (fill volume), and their difference, and displays the result in the Edge2 app The volume difference at tapped locations on the point cloud is also calculated separately and displayed in the Edge2 app



Select the point you want to check (a pin will appear), and press “Acquire the altitude”.

The results are displayed.



- Supports correction data distribution via Wi-Fi dongle during base station broadcasting  
 No changes to the UI flow  
 The button label has been changed from “LTE” to “Ntrip Caster”; select “Ntrip Caster” when using a Wi-Fi dongle

固定局モードの設定を行ってください。

ポイント1(既知座標系) (既知点) 緯度/経度: DMS

X(E)	Y(N)	Z	緯度	経度	楕円体高
22842.649	-44040.093	3.260	35.361002485	140.050764988	33.704

Ntrip Caster
  Wi-Fi
  外部無線機

利用されている衛星数: 8

GPS:	3
QZSS:	0
GLONASS:	5

ポール高 (小数点以下3桁まで)

[? ポール高の計測方法](#)

**From version 9 onwards, all internet communication functions can be used with a WiFi dongle without a SIM card.**

※The recommended dongle model numbers have changed as follows:

■ TL-WN725N



<https://www.tp-link.com/jp/home-networking/adapter/tl-wn725n/>

	Highly recommended	operation-confirmed item
V9.0以前	TL-WN725N	Archer T3U Nano
V9.1以降	<b>Archer T2U Nano</b>	TL-WN725N

■ Archer T2U Nano (**Highly recommended as internet communication is fast**)



<https://www.tp-link.com/jp/home-networking/adapter/archer-t2u-nano/>

## Step1.

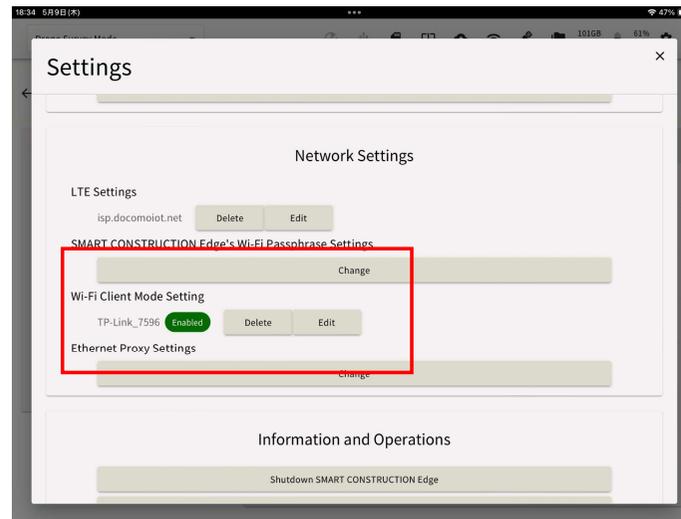
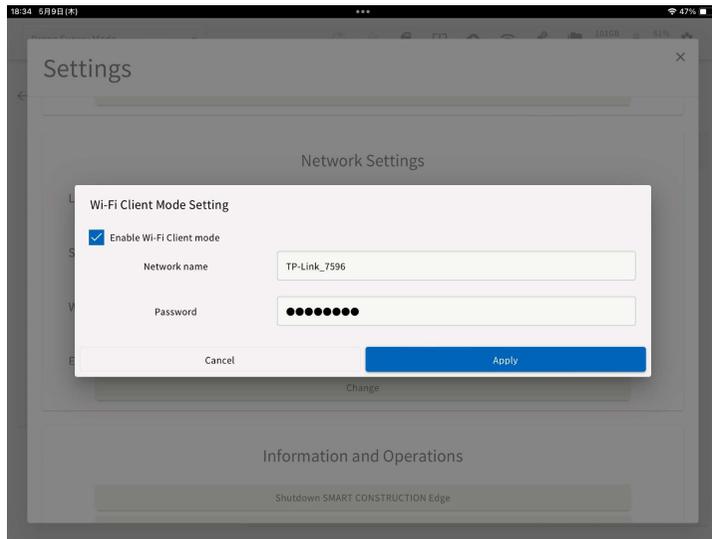
. Tap the Add WI-FI Client Mode Settings icon in the Edge2 Settings menu and enter the SSID and password.

## Step2.

. Confirm that the settings have been enable

## • Step3.

- Insert the WIFI dongle into Edge 2 and wait for 30sec, after that make sure internet connection.
- If you are having problems with your internet connection, please restart Edge 2.





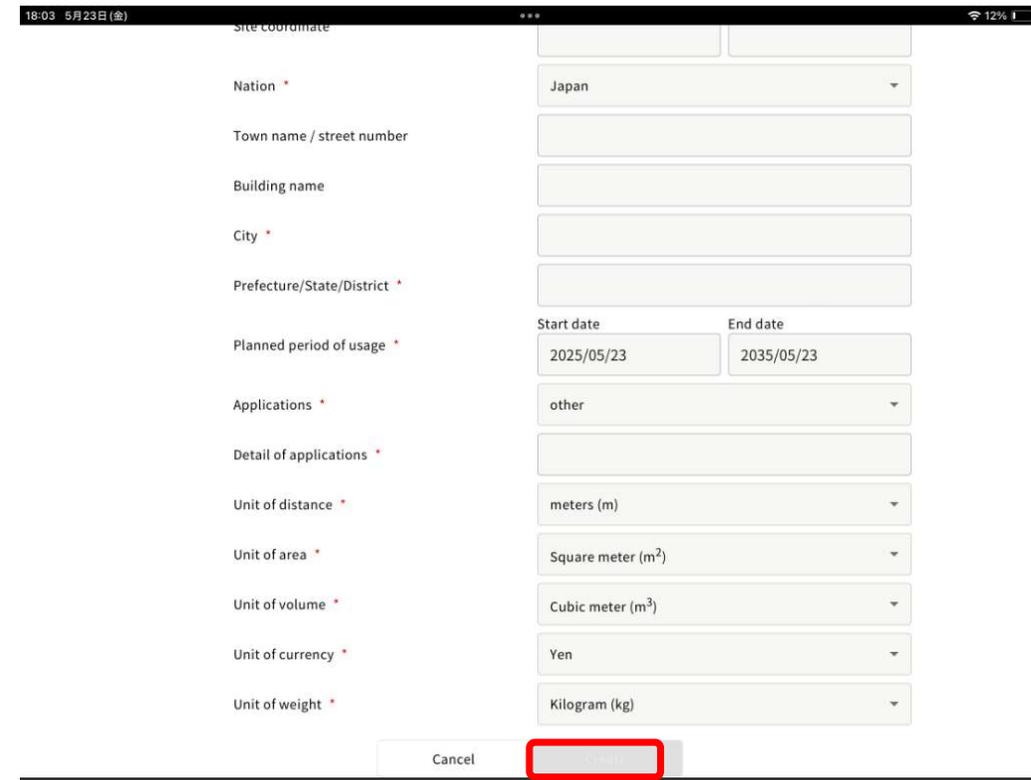
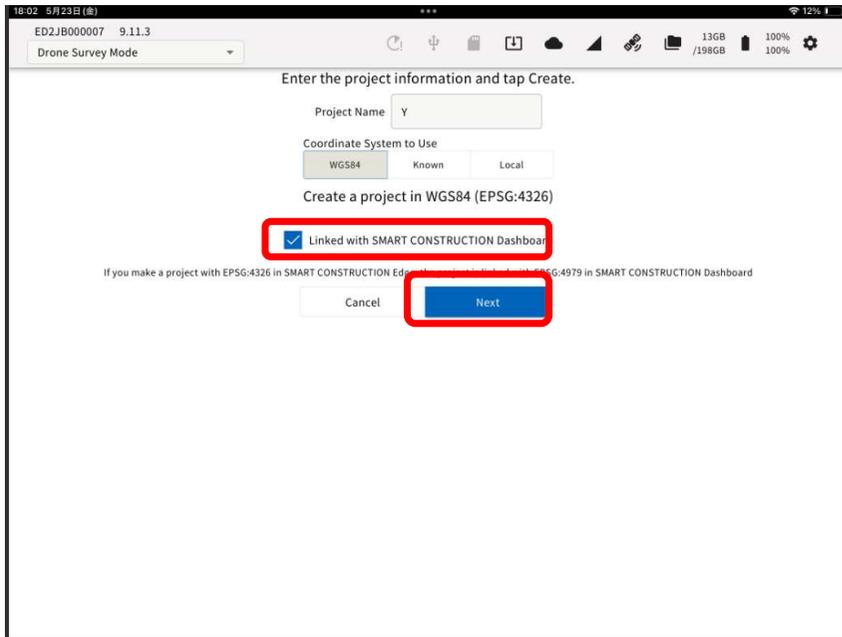
- Improve the system to notify users when RTK correction information distribution is interrupted. Display an alert message when the distribution is interrupted or resumed. The alert should disappear once the interruption is resolved.

The screenshot shows the application interface for a local project. At the top, the status bar displays 'EB12345678 1.0.0' and '固定局モード'. The main header is 'ローカルプロジェクト (Feet)' with a sub-header 'ローカル座標系 (国際フィート)'. The central display shows '配信中 (00:06:41)'. Below this is a table for 'ポイント1 (既知座標系) (既知点)' with columns for X(E), Y(N), Z, 緯度, 経度, and 楕円体高. The table contains one row of data: X(E) 22842.649, Y(N) -44040.093, Z 3.260, 緯度 35.361002485, 経度 140.050764988, 楕円体高 33.704. Below the table are three tabs: 'Ntrip Caster', 'Wi-Fi', and '外部無線機'. Under 'Ntrip Caster', it shows '利用されている衛星数: 8' and a breakdown: GPS: 3, QZSS: 0, GLONASS: 5. A red-bordered warning box contains the message: '⚠️ 配信を中断しました。再開しています。'. Below the warning, it says '配信を終了してから電源をオフしてください。' and a blue button labeled '配信終了' is visible.

ポイント1 (既知座標系) (既知点)			緯度/経度: DMS		
X(E)	Y(N)	Z	緯度	経度	楕円体高
22842.649	-44040.093	3.260	35.361002485	140.050764988	33.704

A new feature has been added to allow projects created first in Edge2 to be inherited by the Dashboard.

- Enter the required information for creating a Dashboard project in the Edge2 application, and create the project on the Dashboard.



Check "Linked with SMART CONSTRUCTION Dashboard," then tap Next.

Enter the required information and press "Create."  
A project/site will be created in both Edge2 and the Dashboard.

■ ■ v9.11-RC1 update5

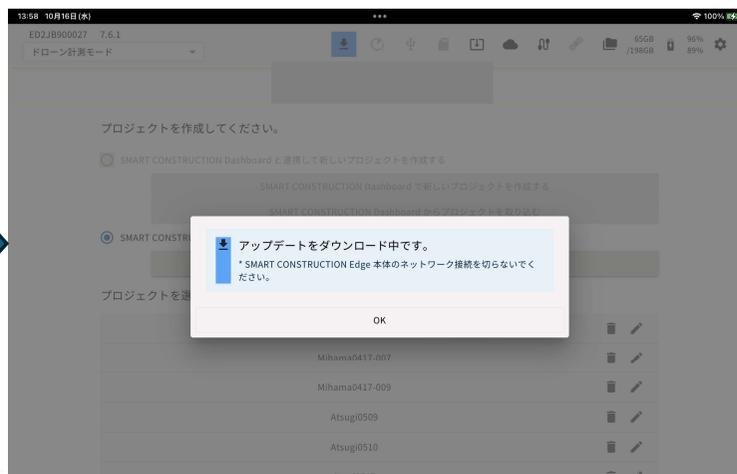
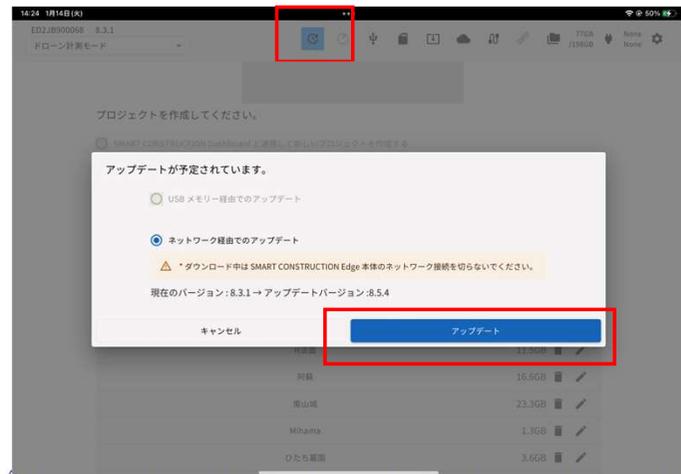
OTA名称 : "9.11.5"  
 FW VERSION : "9.11.5"  
 OS VERSION : "7.1.0"

In a good network environment, such as a wired LAN connection, it will take approximately 30 minutes. For LTE, it may take 1 hour or more. By good internet connection, we mean a downstream speed of around 50Mbps. If the internet connection is poor, the update may take around 3 to 4 hours, and in some cases, considerably longer.

\*We recommend updating your iPad's OS to iOS 18.2 or later.

<Update procedure for v7 and later>

- After the update files have finished downloading over the network, press the restart button.
- When the green LED stops flashing and stays lit, the update, including the OS, is complete.



**Ready to update.**  
 Please restart SMART CONSTRUCTION Edge immediately.

- \* Connect the AC adapter during the update.
- \* Do not turn off SMART CONSTRUCTION Edge during the update.
- \* Update takes around 5 minutes.
- \* If the Error/Update LED at front of the main body was lit solid, then do not turn off the power.

If you turn on the unit next time and the unit was connected to the internet, application will be updated.

Reboot later
Restart

### Background: Defects Related to Battery Charging

There have been several instances where the battery could not be recharged. To address this, we will update the battery control microcontroller. The upgrade process will proceed as follows:

1. The application will be downloaded as usual.
2. After the download is complete (indicated by an orange arrow), please turn the power OFF and then ON.
3. The OS download will begin.
  - Once the OS download is complete, a pop-up window will appear on the right.
4. When the AC adapter is connected and the restart button is pressed, the red LED on the 4-way indicator will light up temporarily. Please wait for the process to finish.
  - When the power turns off, restart as usual to complete the update.

### Important Notes:

- If AC power is not connected during step 4, please turn the power off and on as usual. However, the sub-microcontroller will not be updated in this case.
- The sub-microcontroller update will occur when the power is turned off after AC power has been connected while the device is on.

