Smart Construction Simulation
2024.1.17(Schedule) About the Release Version

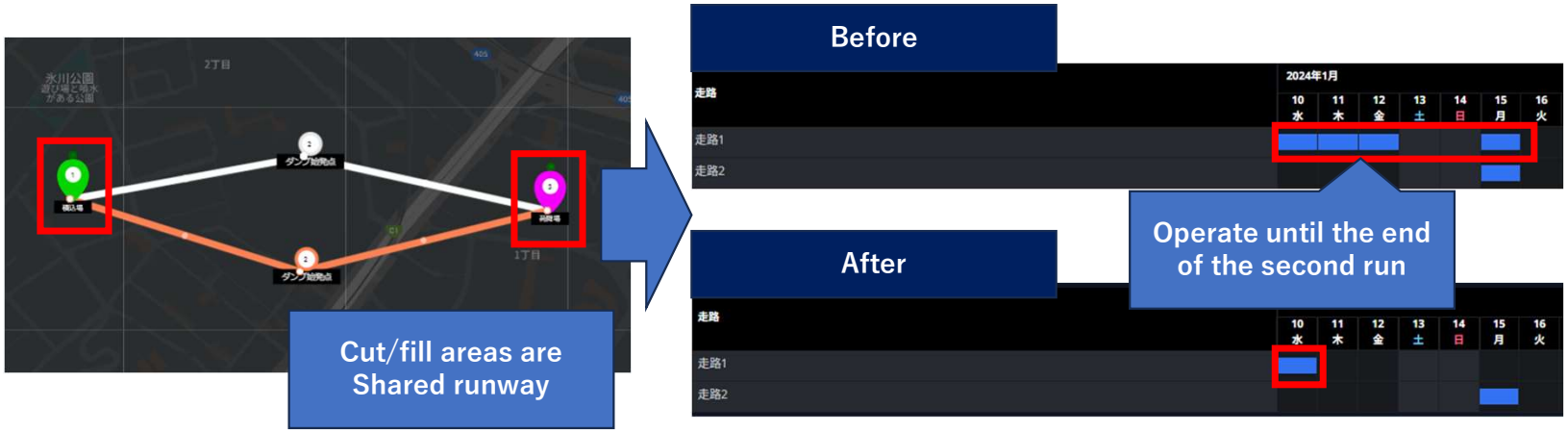
EARTHBRAIN

Release Item List

- We are pleased to announce the release of updates to "Smart Construction Simulation" with the following schedule and content.
- Due to system maintenance, the relevant services will not be available during the following dates.

(*The release schedule, time, and contents are subject to change depending on the situation. Please understand this in advance.)

Schedule： Tuesday, January 16 (Japan time)　7:00 p.m. - 8:00 p.m.

NO.	Target Functions	Overview
1	Machine Simulation (Bug Repair)	• Overview：Fixed a problem in which the operation of the first run was recorded until the end of the second run when the cut/fill area is shared. • Details：When performing a calculation using “Standard Calculation” with a shared cut/fill area, a problem has been fixed in which the operation of the first run would be recorded until the end of the second run. 

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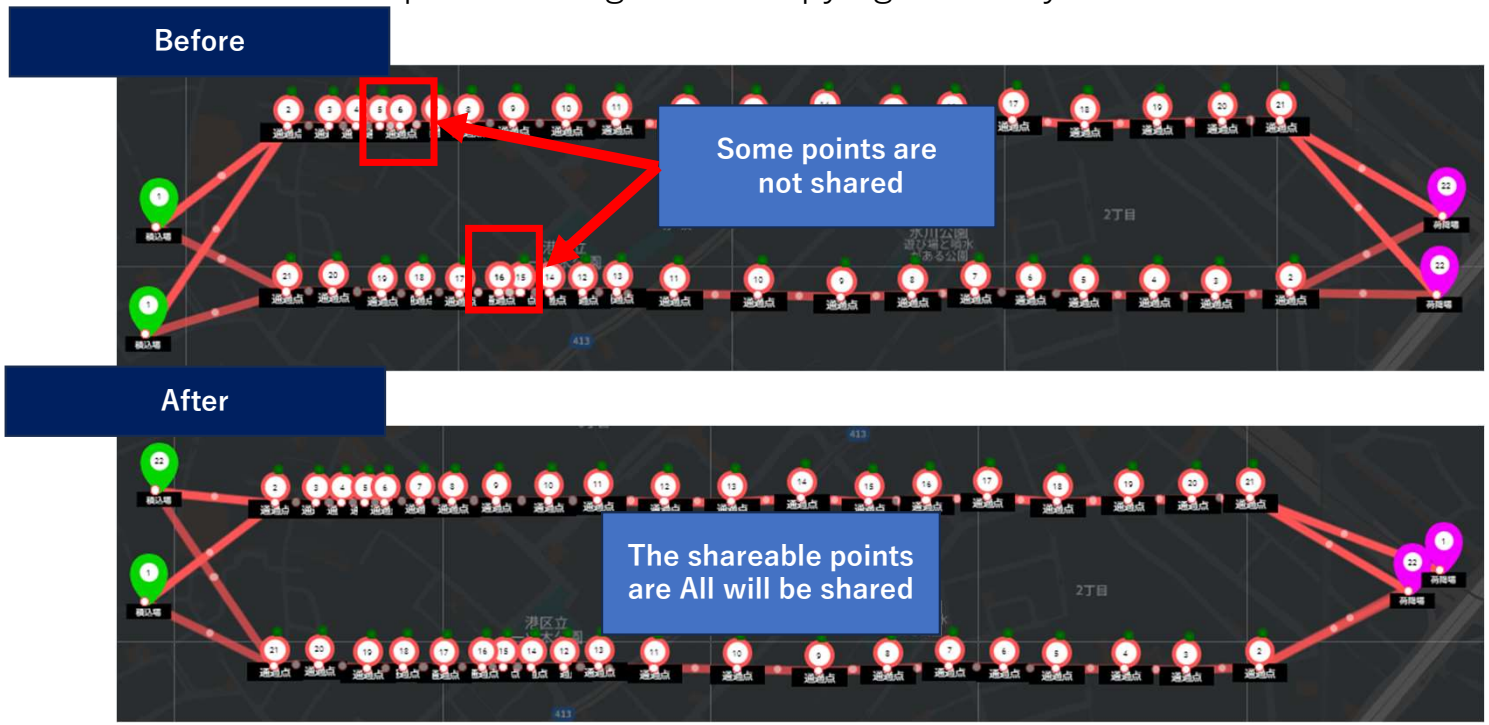
NO.	Target Functions	Overview
2	Machine Simulation (Bug Repair)	• Overview：Fixed a problem that some points were not shared when copying a run when the number of points increases. • Details：When copying a runway with many points, some points were not shared. This problem has been corrected so that some points are shared correctly even if the number of points is large when copying a runway. 

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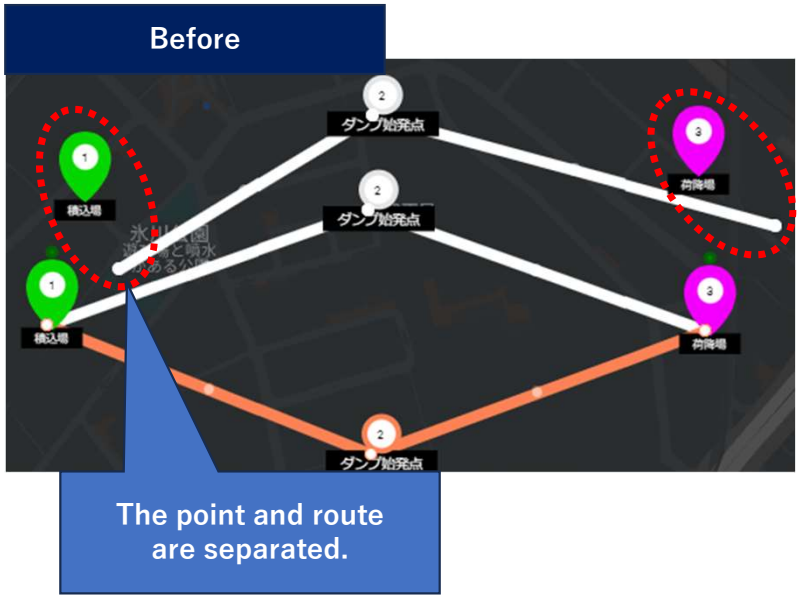
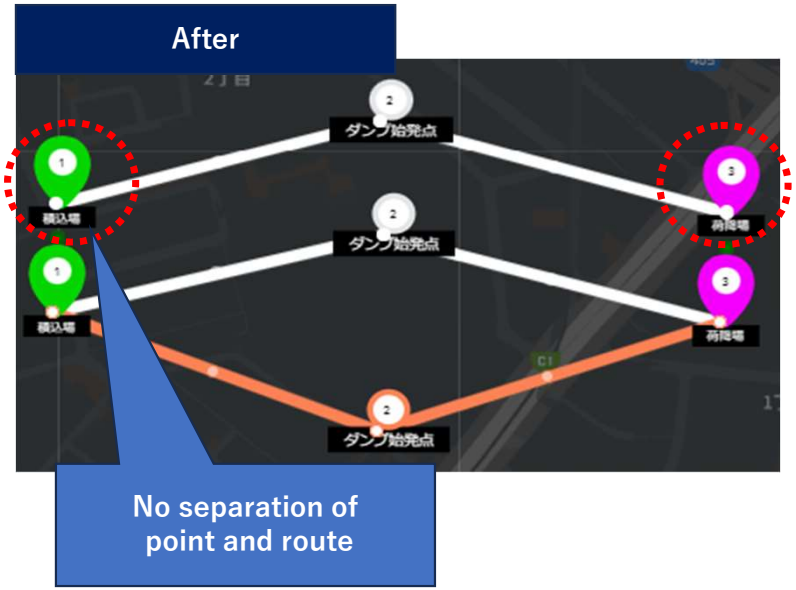
NO.	Target Functions	Overview
3	Machine Simulation (Bug Repair)	• Overview：Fixed a problem that prevented proper runway copying when a cut/fill area is shared. • Details：When copying a runway that shares a cut/fill area, the point and route of the destination runway would be separated. The problem has been corrected so that copying a runway can be performed normally even if the construction area is shared.  

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NO.	Target Functions	Overview
4	Machine Simulation (Bug Repair)	• Overview：Fixed a problem in which runway color changes between load-fit points were not reflected after copying a runway • Details：When changing the runway color after copying a runway, the runway color between load fit points was not reflected. The problem has been corrected so that the runway color is reflected correctly.

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NO.	Target Functions	Overview
5	Machine Simulation (Function Improvement)	• Overview：Improved dump fuel economy calculations and soil volume per overall fuel economy calculations • Details：The following two changes have been made to the calculation of soil volume (m3/L) in the cost table. <Change 1> When construction equipment is reused, soil volume (m3/L) and fuel consumption (km/L) are calculated for the first run. <Change 2> Fuel consumption (m3/L) = Total soil volume transported on all routes ÷ Total fuel consumed by all construction equipment. **Change 1** 走路1 稼働率 / 燃費 (km/L) / 燃料費 (円) / 土量 (m3/L) 54.69 (%) / 0.9 / 14,616 / 2.74 15.21 (%) / 11,518 **Fuel consumption and soil volume for the first run were being calculated** **➡Corrected to be calculated based on the total of the relevant runway** **Change 2** 集計表 詳細 名称 / 平均単価 / 数量 / 金額 (円) / 費用計 / 金額 (円) / 土量 (m3/L) Load capacity: 40t / 75,400 円 / 台日 / 2 台日 / 150,800 / 機械費 / 361,400 / 2.74 Bucket capacity: 1.9m3 / Vehicle weight: 45t / 40,300 円 / 台日 / 2 台日 / 80,600 Vehicle weight: 100t / Blade width: 5265mm / 65,000 円 / 台日 / 2 台日 / 130,000 建機オペレーター / 16,000 円 / 人日 / 4 人日 / 64,000 / 人件費 / 64,000 消費燃料費 / 0.83 合計 **Calculated with fuel consumed by dump trucks** **➡Corrected to calculate by fuel consumption of all construction equipment**

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NO.	Target Functions	Overview
6	Machine Simulation (Function Improvement)	• Overview：Changed dumping capacity formula on work capacity screen of selected machines • Details：Added “÷ Soil Conversion Rate (L)” to the formula for loading capacity (m3) so that the work capacity of dump trucks is calculated by the amount of soil to be loosened.The following displays on the work capacity screen of selected machines have been changed.

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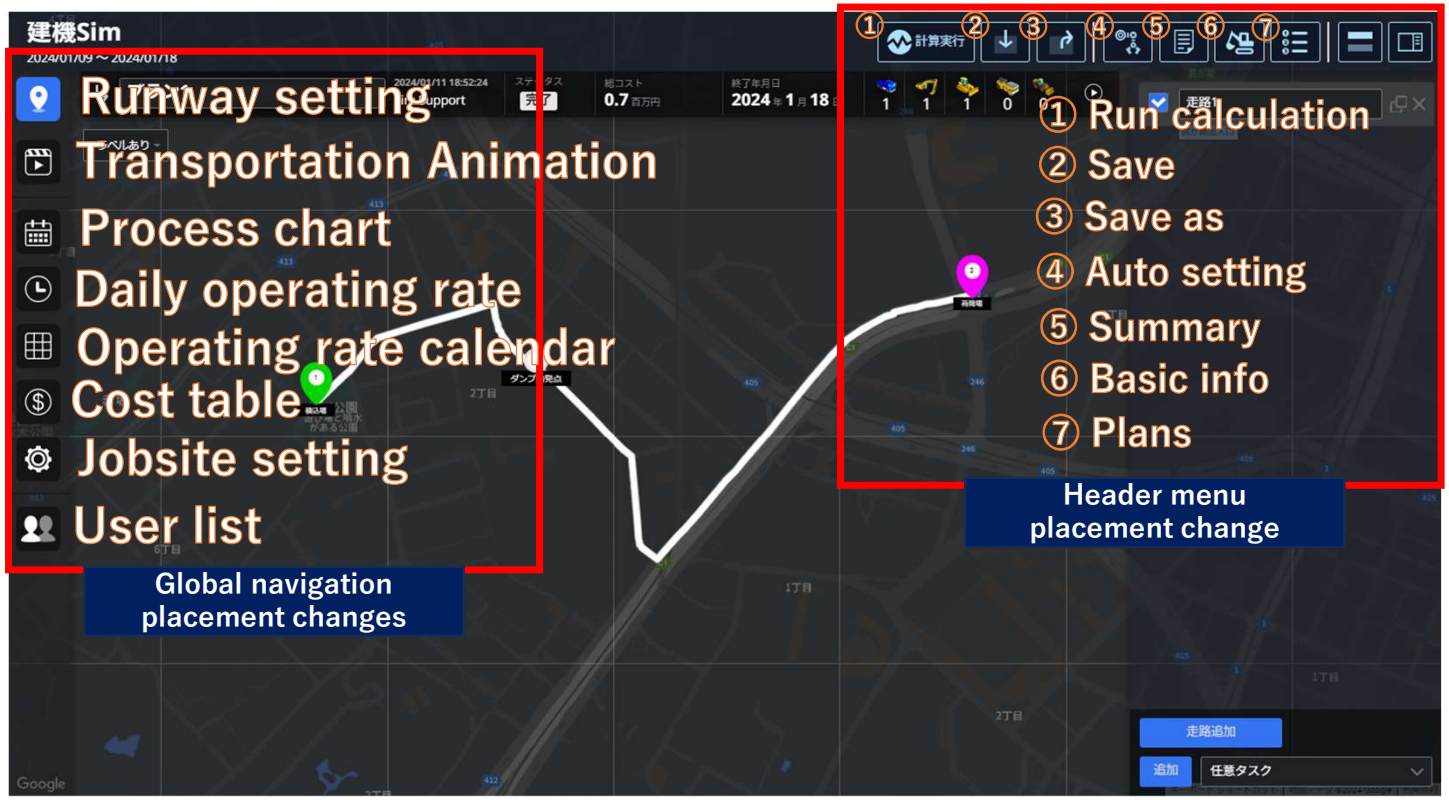
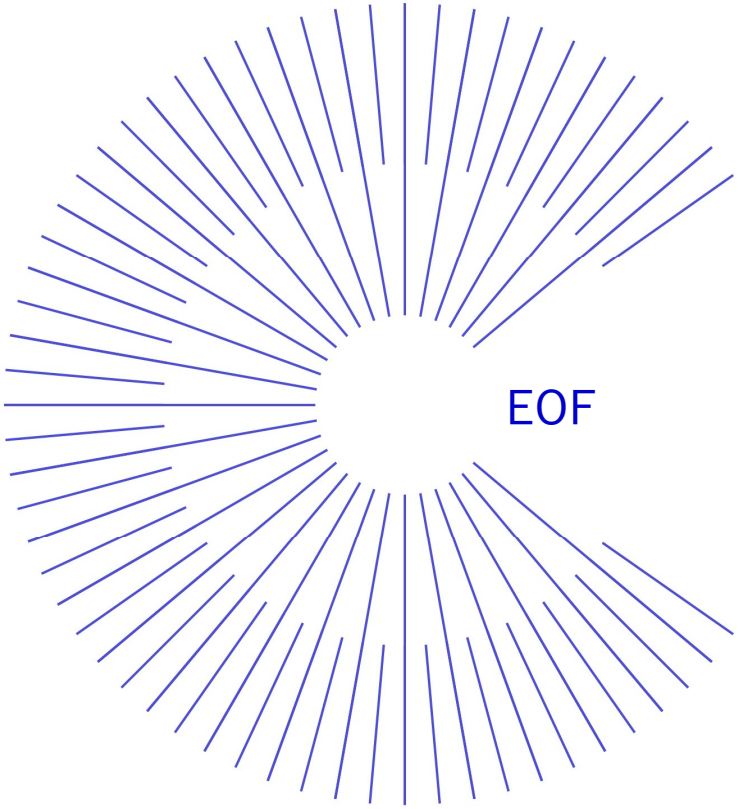
NO.	Target Functions	Overview
7	Machine Simulation (Function Improvement)	• Overview：UI/UX improvement of construction equipment Simulation • Details：The following three changes have been made to improve the UI/UX of Construction Equipment Simulation. <Changes> ① A dialog box for adding a runway has been added. A screen for adding a new runway based on the information entered after setting the site information, construction equipment settings, and cut and fill areas has been added. ② Added a screen for editing foundation data when performing calculations. Added Edit screen for foundation data as a screen for changing foundation information prior to calculation execution ③ Changed icon placement Icons are rearranged in consideration of the order/frequency of use, etc. ※For details of the above, please refer to the next page and thereafter.

NO.	Target Functions	Overview
7	Machine Simulation (Function Improvement)	① A dialog box for adding a runway has been added. A screen for adding a new runway based on the information entered after setting the site information, construction equipment settings, and cut and fill areas has been added.

NO.	Target Functions	Overview
7	Machine Simulation (Function Improvement)	② Added a screen for editing foundation data when performing calculations. Added Edit screen for foundation data as a screen for changing foundation information prior to calculation execution

NO.	Target Functions	Overview
7	Machine Simulation (Function Improvement)	③ Changed icon placement Icons are rearranged in consideration of the order/frequency of use, etc. 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