System test case - #4_1

Test case details

Tester: Eetu Luoma

Date: 3.4.2025

Device: Desktop computer, high-end, Windows 11 Home V.24H2 x64

Environment:

- Most recent main branch
- Most recent commit is fd8e4ddbc58aeb8f54f8b908108b10174a612e3b
- Unity editor version 6000.0.35f1
- Generated runnable .exe via File > Build and run

Test details

This system test is exploratory in nature. The simulation is run via the built .exe with the purpose of testing the performance of the simulation with the new features impacting it, mainly the simulated ar / pointcloud mesh. The tester will see if performance problems still persist when the mesh is visible, and if it is solved via toggling the visibility of the mesh off. Tester has a powerful computer, which should be taken into account.

Test steps and results

1. Open the project with Unity Editor, go File > Build Profiles, and Build the project for the Windows platform. The tester chooses to build it into a folder called 'BuildTarget' in the repository directory.
   a. Result: Build succeeded in 14 seconds.

2. Run the executable
    a. Result: Simulation starts and runs successfully
3. Run and look around the simulation in order to simulate the ar mesh being created
    a. Result: Points were scanned and simulated mesh created. There is significant stuttering/frame drops on the testers high end machine when running and looking at the ground (where simulated mesh is being created), regardless of whether the mesh is visible or not.

Tester decided no further testing is needed at this point, since it seems clear that there is a performance issue related to the creation of update. Issue #96 created to at least investigate this problem and solve if possible. This test case should be ran again if a fix is implemented.

Conclusions

Issue created.