

What to look out for during physical environment flight:

1. Always initialise crazyflie drones on optitrack as a rigidbody when the drone is facing the positive x direction in platform coordinates (positive z on optitrack). Otherwise the crazyflie will immediately crash on the floor when it starts running. This immediate crash generally corresponds to a coordinate issue.
2. Although it should be managed by the platform, the crazyflie has been known to have drifting issues if it is spammed too frequently with messages. If this kind of issue is seen during flight consider limiting the frequency of movement commands sent to the drone.
3. Make sure the crazyflie radio has a clear 'view' of the crazyflies as link quality is not ideal.
4. The half of the motion tracking environment on the east end has very poor tracking (especially the north eastern corner). It is best to generally avoid flying in this half and instead restricting flight to the western half.
5. Ensure drones are well charged before flight.
6. Remember to launch any supporting drone type ROS nodes (such as the crazyflie server) before the drones themselves are added to the platform session.
7. If using vrpn, ensure that vrpn streaming is enabled on Motive and the output is set to z-up. If using natnet, ensure vrpn streaming is disabled on Motive and output is set to z-up.
8. Last time we used natnet_ros as the natnet implementation it had crashing issues when a rigidbody unexpectedly loses tracking. For this reason it is recommended to use vrpn_client_ros or to write a better natnet implementation.
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