

# Floating Origin System – User Guide

## Setting Up The Floating Origin

1. Add a **FloatingOriginManager** anywhere in the scene.
2. Add a **FloatingOriginObject** component to the root transform of any object that must move when the floating origin position changes. This includes the player ship, the camera, enemy ships, projectiles, missiles etc.

The floating origin manager has a reference to the 'Focused Transform' which is the object that must be kept near the center of the scene. This is usually the camera (specifically, the root transform of the Vehicle Camera object).

## Managing Floating Origin Shift

When objects are shifted during a floating origin position change, it can cause issues with things like trail renderers.

The **FloatingOriginObject** component will automatically handle all trail renderers in an object's hierarchy if the 'Manage Trail Renderers' checkbox is checked.

If there are other things you need to manage, you can use the 'On Pre Origin Shift' and 'On Post Origin Shift' events on this component, which are called before and after an origin shift, respectively. You can use the first event to call a function that stores the state of an object before the shift, and the second to call a function that implements the correct state if it has been affected by the origin shift.