Urban Roads and Traffic System

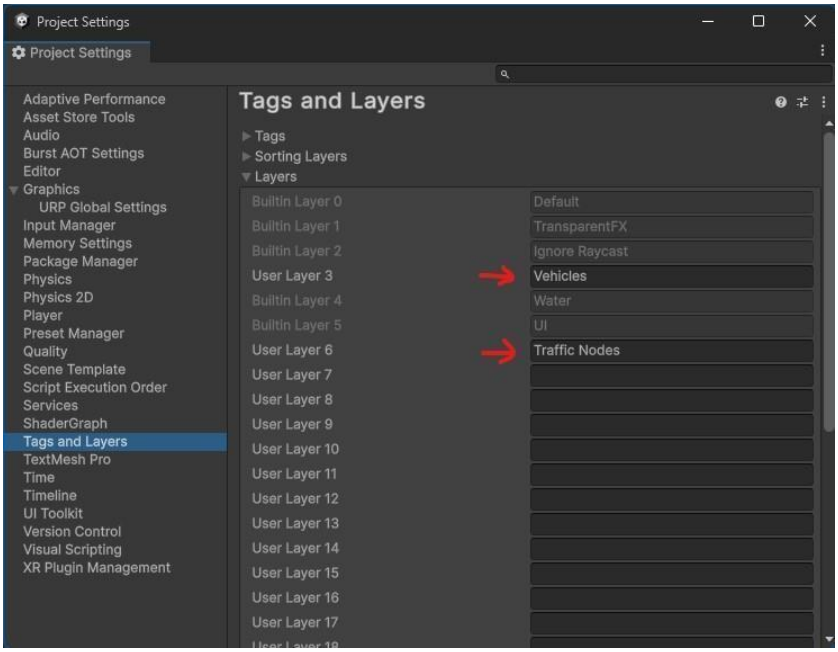
Documentation

Getting Started **Setup**

Layers:

Go to: Edit > Project Settings > Tags and Layers

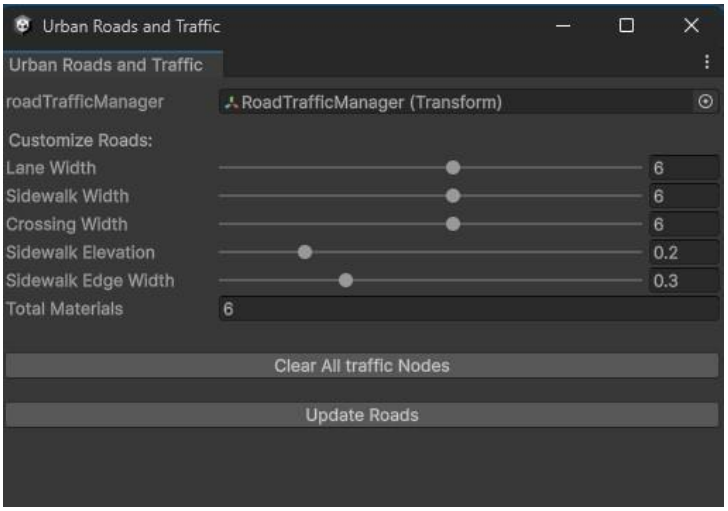
Add two layers named “Vehicles” and “Traffic Nodes”.



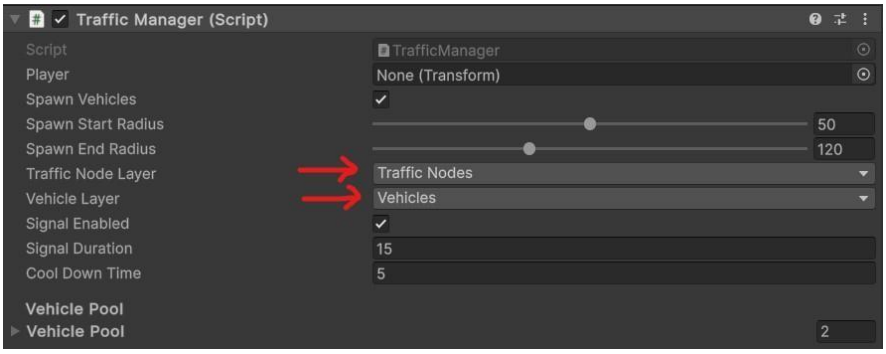
Add “RoadTrafficManager”:

From prefabs folder locate and add RoadTrafficManager prefab to your scene. There should only be one instance of this prefab in one scene.

Go to: Window > GameDevStuff > Urban Roads and Traffic to access the Urban Roads and Traffic window. Assign the RoadTrafficManager instance to the roadTrafficManager variable.



Set the two 'Layermask' variables of the Traffic Manager Component to "Traffic Nodes" and "Vechicles" as shown below.



You can now start making road networks.

Creating Road Networks

Make sure the scene has a flat ground plane.

Adding Road Nodes

With the RoadTrafficManager selected, hold Alt and click anywhere in the scene where you want to insert a road node. Use **Alt + Click** to add further nodes into the scene. Each road node represents a road junction.

Adding Road Connections

To add a connection between two nodes, select first node and press "**C**" then select the next one and press "**C**" again. The connection will be added. To cancel connection operation in between press "**C**" again with the same node selected.

Add the appropriate connections and **make sure all nodes are covered in closed loops.**

Generate Road Networks

After adding road nodes and road connections, press the “Update Roads” button in the “Urban Roads and Traffic” Window. The road and sidewalk mesh will be generated in the scene.

Setting up vehicle AIs

The asset comes with a “Test Vehicle” Prefab. Make sure to change the layer of the collider to “Vehicles”. For “TestVehicle” prefab the “Chasis” child object should have the ‘Vehicles’ layer. You can modify the prefab by disabling the default Chassis and adding custom vehicle model and colliders. Reposition the vehicle colliders according to your new vehicle model. Create Prefab variants for different vehicle models from the Test Vehicle Prefab.

Traffic Setup

Locate the “TrafficManager” Component in the RoadTrafficManager Object. Assign the player transform to the “player” variable. This enables the traffic manager to spawn vehicle AIs near the player. You can customize the spawn start and end radius.

Assign the “Traffic Nodes” and “Vehicles” layers to the Traffic Node layer and Vehicle layer masks.

Vehicle Pool

Create vehicle pool by assigning your vehicle prefabs to the vehicle pool list in the traffic manager component. The traffic manager randomly spawns vehicles from this pool.