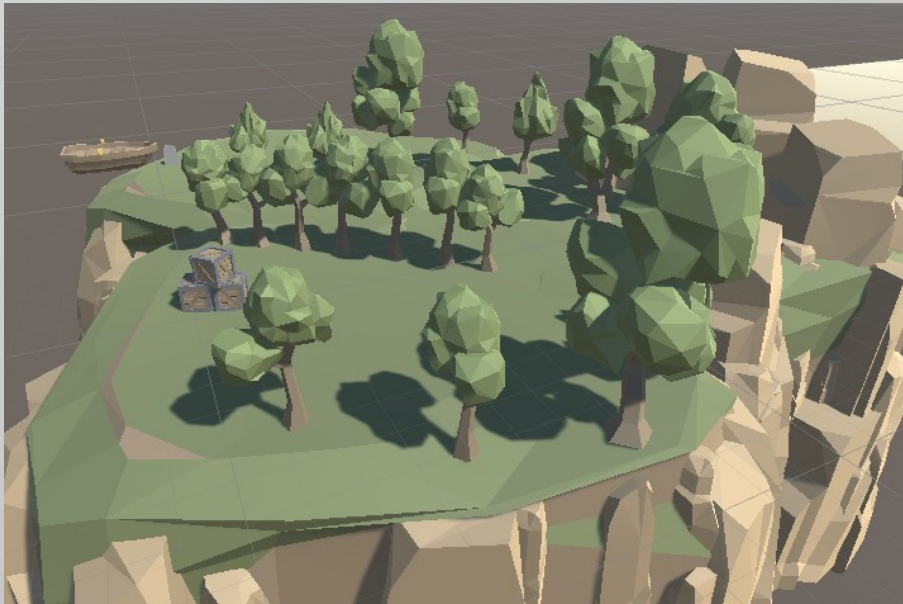


Placr

User Manual



Version 1.0.0

Revision 2

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1. Introduction

Thank you for downloading Placr!

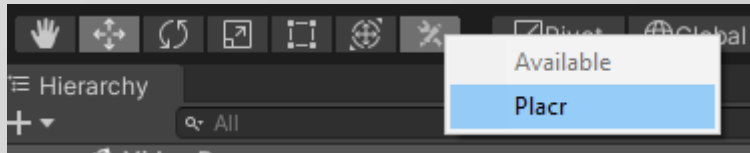
It's a small, but handy tool that was written after playing a theme park building game, in which hand-placing objects seemed way more enjoyable than in the Unity editor.

As a level designer, you are probably (hopefully!) familiar with the powerful tool palette that Unity already offers: <https://docs.unity3d.com/Manual/PositioningGameObjects.html>

There are also third-party tools for algorithmically placing objects, for creating forests, for example. However, it felt like we were missing a way to place a lot of objects by hand. That's what Placr is for.

2. Open Placr

To open Placr, find it in the toolbar at the top right of the Unity Editor.



When you select it, Placr's settings window will appear in the scene view.



The meaning of those settings are explained in 4. Settings.

3. Using Placr



When Placr is open, **select a prefab** in your assets and **left click** into your scene to create a new instance at your cursor's position. Placr uses Unity colliders to detect that position, so your scene should have colliders.



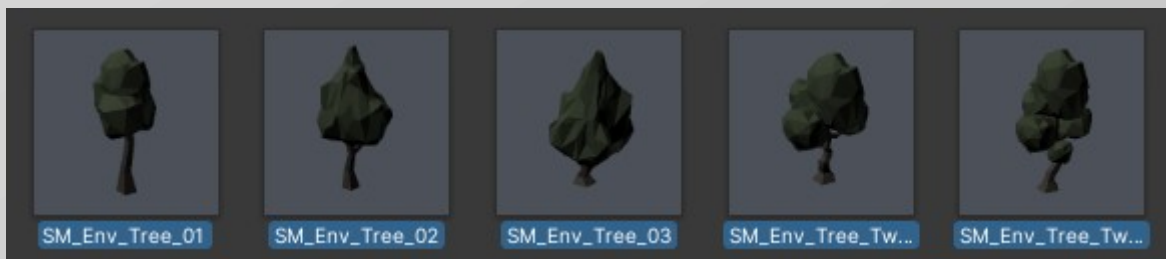
Hold **Ctrl** (option on MacOS) and move your mouse sideways to rotate the object before placing it.



Hold **Shift** and move your mouse vertically to create a vertical offset for your object. This way, you can let objects float in the air or move them partially underground.



Right click to deselect the prefab. This requires Unity 2020.1 or higher. Alternatively, deselect the prefab in the project view.

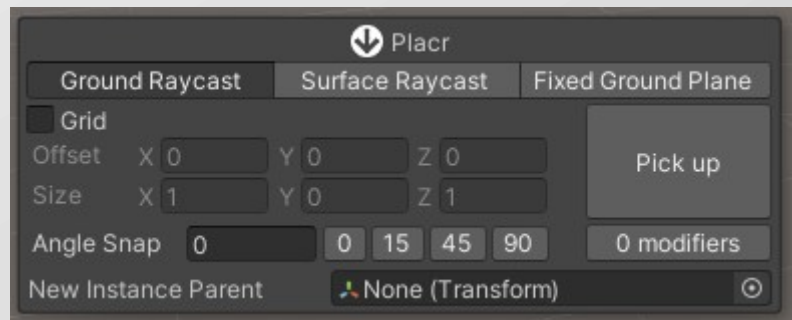


Select multiple prefabs at once to make Placr pick a random prefab after each click. As an example, you can select multiple tree prefabs and create a varied forest.

Select an object in the scene and click the **"Pick up"** button in the settings window to pick the object up and place it somewhere else.

4. Settings

As long as Placr is the active tool, its settings window is displayed in the top right of your scene view.



Raycast Mode

The top three buttons let you pick one of three “raycast modes”.

Ground Raycast means that objects are placed upright wherever your mouse cursor is over.



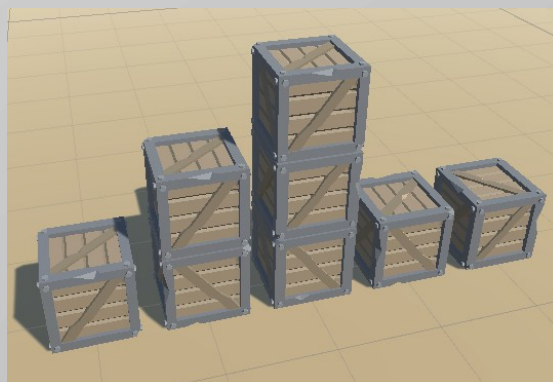
Surface Raycast will use the hit surface’s normal vector as the upright direction of the object.



Fixed Ground Plane allows you to place objects without any colliders to place them on. Instead, objects will be placed at zero height, but you can still hold the Shift key to change the height offset. This mode can be used to place ground objects in empty space before placing more objects on them.

Grid

When you enable the grid checkbox, objects will adhere to the grid you set up below.



Angle Snap

Enable angle snap to have your object snap to a multiple of the entered value while you rotate it. You can enter any value or click one of the preset value buttons.



New Instance Parent

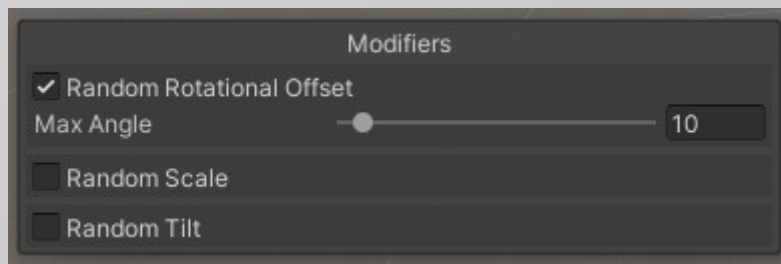
Drag any object from the hierarchy into this field to make it the “new instance parent”. Whenever you place a new object with Placr, this object will be its parent. This is virtually identical to the “default parent” feature that newer Unity versions have.

5. Modifiers

Modifiers are things that you can enable and set up in order to change Placr’s behavior when instantiating a new prefab instance. By default, Placr comes with multiple modifiers, like adding a random rotation to the new object.

5.1. Using modifiers

To use one or more modifiers, click the “0 modifiers” button in the settings window, below the pick up button. A list with all available modifiers will open.



Enable a modifier with the checkbox next to it. This opens a list of its settings.

The **Random Rotational Offset** modifier will apply a random rotation onto your manually set rotation. When the Max Angle setting is set to 10, this means an offset between -10° and $+10^\circ$ on the Y axis. Set the Max Angle to 180 to have an entirely random rotation for each new object you place.

The **Random Scale** modifier applies a random scale to each new object. The scale is between the given Min and Max vectors. If you enable the “Same Horizontal Value” checkbox, the Z axis scale will be the same as the random value chosen for the X axis.

The **Random Tilt** modifier will apply a random tilt to each new object. The tilt direction is entirely random, while the tilt angle is randomly chosen between the two values you can set.

5.2. Writing custom modifiers

You can expand the list of available modifiers by adding new modifier classes to the project. Simply create a class that inherits from `PlacrModifierBase` and override the `title` property and the `ApplyTo(GameObject)` method. Feel free to check out the source code of the existing modifier classes.

6. Support, News and Updates

If you have questions, issues, proposals or want to get to know other developers, feel free to join the 13Pixels slack workspace: 13pixels.de/slack. This is also the place for news and update for 13Pixels packages!

Alternatively, you can write a mail to assetstore@13pixels.de.

This package is hosted at [GitLab.com](https://gitlab.com), including issue tracking. Instead of downloading from the Asset Store, feel free to add Placr to your project by adding it through a git url in Unity's package manager.

Have a productive time!