Surface Align Tool

Last update: January 11, 2022

Product Overview

Surface Align Tool is an editor tool that allows you to snap an object to the collider of another while aligning it with its normal.

Usage

(The example scene is made with the built-in renderer. If you are using URP or HDRP you will have to upgrade/convert the materials used to the new render pipeline.)

First, make sure the target surface you wish to snap on has a collider.

This can be a:

- Box Collider
- Sphere Collider
- Capsule Collider
- Mesh Collider

Note: snapping to a Mesh Collider will not be as smooth and works best if it is at scale 1

Not tested on 2D colliders

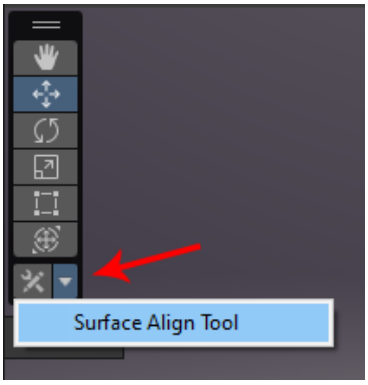
Enable and use the tool

1) To enable the tool select it from the dropdown in the toolbar as shown below:

   OR activate it using the shortcut: **S**

   (You can change the shortcut in Edit > Shortcuts > Activate Surface Align Tool)

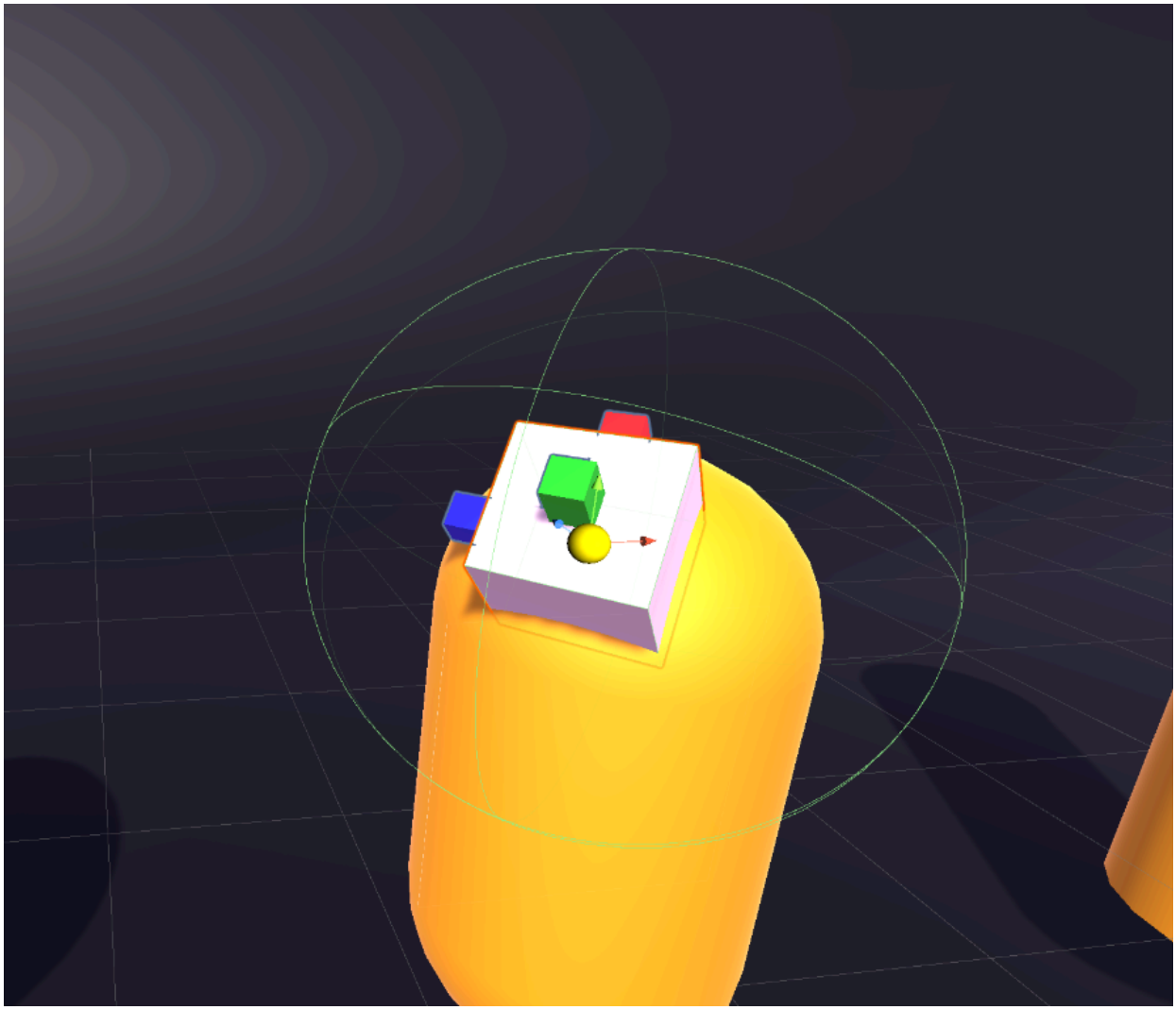
Unity 2020.2 or newer



Older Unity versions



2) Select the object you wish to move
3) Move the object using the position handles or drag the dot in the center to move it with the mouse. The object will automatically snap and align to any collider in its radius.

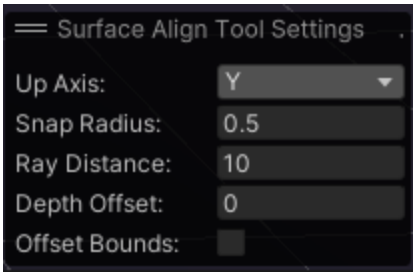


Settings

The settings can be found here:

Unity 2020.1 or newer

In the scene view as a window:



Older Unity versions

The settings window in the scene view will not work in older Unity versions.

Find the **SurfaceAlignTool_Settings** object inside the Resources folder of this asset to change them instead.

Setting	Description
Up Axis	The local axis of the object which will be aligned to the normal of the target surface
Snap Radius	The object can snap to surfaces inside this radius
Ray Distance / Raycast Distance	The distance the mouse can detect surfaces at when dragging the object with the center dot handle
Depth Offset	The amount the object will be offset from the surface in the direction of the surface normal
Offset Bounds / Add Object Bounds To Depth Offset	Adds the object's extent to the depth offset.
Rotate Random (Surface Align Tool +)	Apply a random rotation on release

Thanks!

If you have any questions, don't hesitate to send me an email at:

seppe.peelman.assets@gmail.com

I hope this tool can be a small help for your project and allows you to create amazing things!

Seppe