



Documentation

(to get the newest documentation you can always visit http://bit.ly/1NYBWqJ)

The Knights of Unity © 2015

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Overview

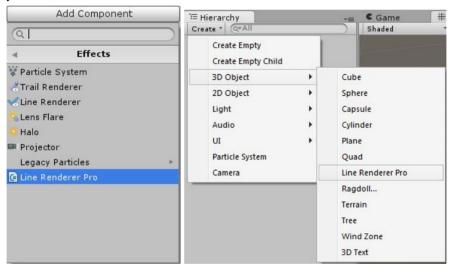
Line Renderer Pro is Unity 3D extension which allows you to create professional lines for your game. The lines are made of points which you can configure just like you want. Easy to use line editor makes it very comfortable to use.

Basics

Creating line

You can create line in two ways

- A. by creating it from "Create" menu (located in "3D Object/Line Renderer Pro")
- B. by adding component to game object (located in "Effects/Line Renderer Pro")

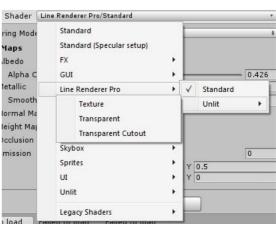


(left - A, right - B)

Materials and shaders

After creating line you will be able to add material to the mesh. Because Line Renderer Pro uses perspective correct texturing of trapezoid to make your line looking good you need to set the shader to the one from "Line Renderer Pro" group. Currently available shaders are

- 1. Standard Shader
- 2. Unlit Texture
- 3. Unlit Transparent
- 4. Unlit Transparent Cutout



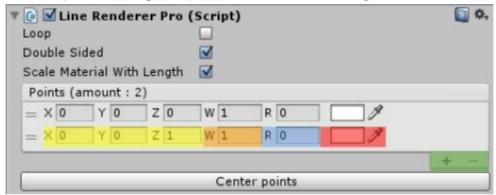
Editing line in inspector

Line Renderer Pro features full inspector editor which allows you to fastly edit your line settings.

Points

First of all you might want to edit points of your line. You can

- 1. Add or remove point (green area on image)
- 2. Configure point
 - 2.1. Position (yellow area on image)
 - 2.2. Width (orange area on image)
 - 2.3. Rounded factor (blue area on image)
 - 2.4. Color (red area on image)
- 3. Reorder points (drag the point in the list to change it's order)



Rounded factor

When you are creating line you can round point connection by increasing rounded factor. Higher means more smooth round but worse performance.

Loop

If you want your line to loop (ending point will connect with starting one) you can select this option.

Double Sided

If you want the line mesh faces to be visibled from the both sides (not only top but also bottom side) you can select this option.

Remember - making your line double sided doubles the amount of drawn triangles.

Scale Material With Length

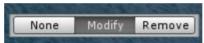
If you want the line material length to be scaled with segment length then you can select this option. Otherwise all of the segments will cover the same part of material.

Center points

By clicking this option you can change position of line game object to center of the line points.

Editing line in scene

Line Renderer Pro allows you to edit your line in scene with live preview. When you select your line small toolbar will be shown in your scene view.



You can change mode by selecting it with your mouse click or clicking "Z" on your keyboard.

As you can see there are a 3 modes of line editing.

- 1. None all line tools are disabled and you can modify the game object with default Unity tools
- 2. Modify in this mode you are able to modify the path of your line. This mode supports 3 Unity Tools.

Also you can add new point by click "Space" button. New point will be placed at the position pointed by mouse.

a. Move - ② ◆ S 冥 回 Move your line points



b. Changed rounded factor - Change rounded factor of line points by dragging slider value or

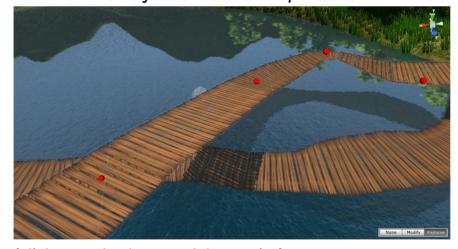
putting value in text box.





(drag white spheres to change the width)

3. Remove - allows you to remove line point

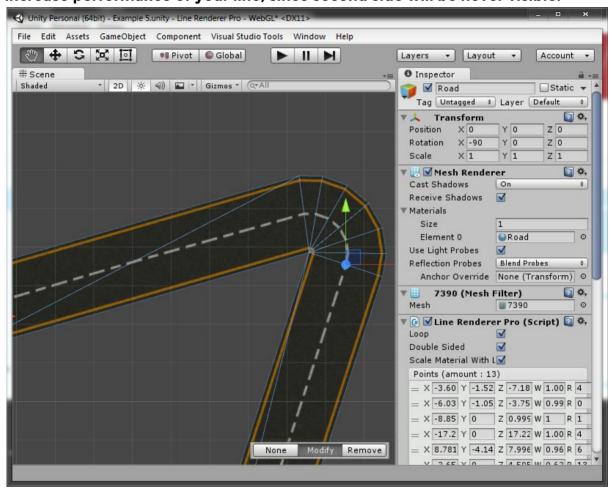


(click on red sphere to delete point)

2D Mode

With Line Renderer Pro you can create your lines for 2D without any limitations. Just rotate your line by -90 in X axis. Then you will be able to see it from 2D scene mode and your 2D camera.

Note that while using 2D mode you can disable "Double Sided" option to increase performance of your line, since second side will be never visible.



Advanced

Scripting

Line Renderer Pro provides you ability to change line settings from the code. The only one thing that you need to remember is to call *SetDirty()* after changing line settings. It will tell Line Renderer Pro to refresh the line mesh in next update.

Custom Shaders

Because Line Renderer Pro uses perspective correct texturing of trapezoid one modification in shader is required. When sampling the texture you need to divide first UVs by the second one. It's something like that $tex2D(_MainTex, uv1.xy / uv2.xy)$

This is the trick that makes trapezoid line segments looking good. Also you can look at the Unlit shaders - they are good examples how it is done.